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What is Hospital Indigency?

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ELIGIBILITY for free hospital care is a subject of material concern not only to the governmental hospitals but the voluntary group in this field as well, in view of the important part the latter has played and is playing in furnishing hospital service for the American people. In proof of this it is pertinent to call attention to some authoritative figures which reveal the fact that our nongovernmental hospitals constitute over 80 per cent of the number of the general hospitals furnishing approximately 68 per cent of the hospital beds. Other figures appear to show that in almost 45 per cent of the more than 3000 counties in the United States with a population of over forty million people there are no governmental hospitals.

A Medically Indigent Person

It would seem fitting, in order that we might reasonably determine the size of the indigent problem, that a few figures be presented having a bearing on the economic status of our population. We are informed reliably that there are approximately ten millions unemployed. We are further informed that approximately twenty million people in the United States are dependent upon tax funds for the minimum essentials of life, namely, food, clothing and shelter. Surveys of cross sections of the American population have revealed that about 40 per cent of the people studied were members of families with combined earning power of less than $1000 per annum, this very large group constituting almost one-third of our population. We find an enormous proportion of so-called medically indigent people.

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A medically indigent person is one who, ordinarily, is self-supporting at what may be considered a reasonable subsistence level but who is unable to pay for medical care when overtaken by illness. It is important to emphasize that a small proportion of our population have incomes sufficient to provide for the problem of illness. We are familiar with our middle or frequently called white-collar class who find the burden of unpredictable illness or sickness of major proportion beyond their financial resources. Then we have the largest majority of our population in the low economic level group, our unemployed, who are unable, through the instrumentality of their own resources, to meet the costs of either moderate or serious illness.

Relationship Between Sickness and Poverty

We possess unquestionable evidence of the intimate relationship between sickness and poverty. Illness as a cause of dependency is a frequent phenomenon. Research studies as to the prevalence of illness in the various economic level groups have revealed a much higher incidence of both acute and chronic disease among the unemployed and those on relief rolls than among those described as gainfully employed. We are further authoritatively informed that the number of those ill and disabled and on relief rolls is three times as large as among those possessing sufficient income.

The duration of illness and disability among our poor is greater than among those in possession of jobs or in the higher economic bracket. We have much statistical evidence of the higher prevalence of illness, as well as the lesser financial ability to provide medical and hospital care among our underprivileged population. This, of course, has resulted in markedly increased demands upon our hospitals and other health agencies for free service.

Economic Value of the Health of Our People

We should be mindful of the very sound stress which has been placed upon the economic value of the health of our people, and that preventable illness and death represents economic community loss. Eminent public health statisticians have called our attention to the fact that our preventable losses from unnecessary illness and frequently consequent deaths totals about three billion dollars annually. If we are in agreement, therefore, that human life represents an important community asset it should be self-evident that community resources should include adequate facilities for the prevention, control, and treatment of disease for all elements of our population. That such adequate facilities are frequently lacking was revealed at the National Health Conference assembled in Washington a little over two years ago.

We can remember that those who were responsible for the presentation of the report revealing a picture of certain unmet needs, particularly emphasized the urgency for the need of expansion of facilities in connection with maternal and child health services. In the field of tuberculosis control, in the treatment of the venereal diseases, and facilities for the care of chronic illness, including cancer, diabetes, rheumatism, heart disease, etc., hospital administrators were particularly interested in the emphasis which was placed upon the lack of hospital facilities in certain sections of the United States, with a population totaling over thirty million inhabitants.

The already-stressed importance of health as a community asset, the need for certain essential health agencies for the maintenance of those activities which prevent disease, as well as the need for the provision of clinical and hospital services for the treatment of illness, focus attention upon the responsibility of tax funds in this field.

Hospital Indigency

While we have exceptions to the rule, our governmental hospitals are fundamentally expected to concern themselves with the care of the nonpaying patients. The definition of hospital indigency, therefore, is of significant interest to this group of the hospitals of America. While the admitting officer of a voluntary hospital may decide if a patient who applies for admission does not fall within the purview of indigent qualifications, woe-betide the admitting officer of a tax-supported institution in the failure of admission of a patient to the public hospital for no matter how trivial an illness.

Budgetary problems of the voluntary hospital structure are familiar to those interested in hospital administration. Diminished contributions from various sources, as well as the decreased ability of many of our population to pay for their hospital care have created problems of serious importance to the voluntary hospitals. It must not be presumed, however, that tax-supported hospitals have been free from the influence of tightened purse strings. In reality, one may very well rationalize that the voluntary hospital, if obliged to, can readily adjust itself by a limitation of its intake in proportion to its financial resources.

In the instance of the tax-supported hospitals, budgets are allocated for a definitely understood period with very little opportunity for supple-

mentation. The already alluded-to difficulties of refusal of admission, too frequently influenced by political pressure, result too often in overcrowded occupancy out of proportion to good hospital care as well as budgetary resources. Much space could be devoted to the presentation of the many financial disadvantages under which the tax-supporting hospital labors.

Who Is Entitled to Free Hospital Care?

That food, clothing, and shelter represent essential human needs and are the obligation and concern of tax funds is universally recognized by organized society. The importance of health has served as a stimulating force responsible for the extension of our voluntary and tax-supported health services, including our hospitals. Increasing recognition of the importance of good medical care and satisfactory hospital service in their relation to the maintenance of adequate health standards, as well as the realization of the fact that these were far beyond the reach of a large element of our population, has resulted in increasing governmental appreciation of the part that tax funds must play in making available satisfactory service for those unable to provide for themselves these essentials. The increasing need, and the greater demands, therefore, for free hospital care, have raised the question as to who is entitled to free care, and what constitutes indigency.

Hospital administrators will be interested in the definition established by the session of the delegates of the American Medical Association two years ago, "A person is medically indigent when he is unable in the place in which he resides through his own resources to provide for himself proper medical, nursing, dental, and hospital care, without depriving himself or his dependents of necessary food, clothing, shelter, and similar necessities of life."

The term indigent has been designated authoritatively as implying "People who have been designated by some public or private investigating body as being incapable of providing themselves with the essentials of life."

We may conclude, therefore, that an indigent person is in substance one who is unable to provide for himself the ordinary necessities of life, which include food, clothing, and shelter. The medically indigent person is one who may be ordinarily self-supporting at a minimal subsistence level but unable to pay for medical and hospital care.

What Is Hospital Indigency?

The advantages of medical care within hospital walls are increasingly recognized as evidenced by the greater tendency to go to hospitals when ill. The benefits of medical care within hospitals include the advantages of group judgment, scientific equipment, technical personnel, essential laboratory services, etc. The average hospital stay has been markedly reduced and the duration of illness materially lessened. These advantages, of course, are the factors which have played their part in the increased desire for hospitalization, with consequent greater economic burdens upon our hospitals, which have faced the serious desions of determining as to who was entitled to free care.

There can, of course, be no conflict with the obligations of the tax-supported hospitals to care for the sick poor. Certainly the person who can not provide for himself or his family these minimal essentials already mentioned, namely, food, clothing, and shelter, is not in a position to provide for his medical and hospital needs. It would seem logical to stress that the persons already receiving public aid may readily be accepted for tax-supported hospital care.

The hospital needs of the medically indigent person require careful consideration. This requires careful study of the individual with certain principles always in mind. If the illness be brief and simple, requiring no substantial expense, one may visualize the possible ability of the medically indigent person to pay a certain part of his hospital bill. Conversely, protracted illness, the need of nursing service, laboratory procedures, x-rays and other essentials, may make it impossible for the person to pay any part of his hospital bill. An individual's income, his material resources, the number of his dependents—these, and other factors play an important part in the decision as to his hospital indigency. Decision here must rest on qualified medical opinion, frequently aided by social study. It is important to keep uppermost in our minds that a person may have a job, and yet be medically indigent in the fullest sense of the word.

Causes of the Increased Costs of Hospital Care

In determining the patient's resources in relation to his medical and hospital needs, it is important to remember the part that the evolution of medicine has played in contributing to the high cost of medical care and hospital management. This is a familiar subject to hospital administrators who have a mindfulness of the tremendous increase in the cost of hospital care. This increased cost, the unpredictability of illness, as well as of its duration, has tended to place medical care and hospital service frequently

beyond the reach of a very large proportion of our population and has increased materially the ranks of the medically indigent.

Increasing Governmental Consciousness of Its Responsibility in Care of the Sick

The above-mentioned increased costs and the greater demands for hospital care have imposed a burden upon the voluntary hospital structure frequently impossible for them to meet, and have resulted in increasing governmental consciousness of its responsibility for the care of those who are unable to provide for their own medical and hospital needs. There has been a marked increase in expenditures of tax funds for hospital care not only in tax-supported hospitals but in reimbursement to voluntary hospitals for the care of the indigent. Justification for such reimbursement was recognized by governmental authorities in view of the fact that facilities for acute care in our tax-supported hospitals were insufficient to meet the needs. The demand upon our governmental hospitals, and the recognition by governmental authorities for the justification of reinbursement to the voluntary hospitals for the care of the poor emphasized the importance for the establishment of standards for eligibility for free hospital care.

Considerable thought and study have been given to the question of eligibility for free hospital care. Committees representing the American Hospital Association and the American Public Welfare Association have enunciated certain well-defined principles governing the hospital care for the needy, particularly in relation to governmental reimbursement to the voluntary hospitals for such care rendered.

Principles Employed in Determining Eligibility for Free Hospital Care

While undoubtedly the report of this committee is a familiar one to this audience that portion which deals with a determination of financial eligibility is particularly related to the subject matter of this discussion and I deem it worthy of presentation.

Among the important principles emphasized were the following:

1 In the examination of the financial eligibility of the person to receive free hospital care, the determination of the medical needs should be a medical responsibility.

2 The determination for eligibility for care at public expense should be the responsibility of the governmental agency authorizing such expenditure.

3 Persons already accepted for maintenance at public expense should be eligible for hospital care without further investigation.

4 For the otherwise self-supporting, decision concerning financial eligibility for care at public expense should be reached by qualified persons after investigation and consideration of certain factors.

It is important to call attention to the fact that the factors alluded to in the previous paragraph deal with those things which enter into the decision as to the determination of medical indigency, namely, income, resources, budget, obligations, type and extent of medical care needed, etc., etc.

Conclusions

It would seem logical to approach the question of free hospital care for those who cannot afford to pay for the same with a realization of its importance as an essential community service, resulting in the maintenance of necessary standards of individual and community health. One cannot quarrel with the establishment and the maintenance of essential admitting machinery, in order to prevent abuse. The interpretation, however, of eligibility for free hospital care should be predicated upon the realization that medical and hospital services have become exceedingly expensive and very frequently beyond the reach of many elements of our population in need of this care.

The inability of the individual to pay for needed hospital care should be the yardstick of measurement.

In summary, therefore, I should like to define the hospital indigent person to be (1) one who is already receiving public aid and assistance; (2) the medically indigent person with a job earning sufficient to provide minimal essentials of life but unable to pay for his hospital care; (3) people who may be able to pay the partial costs of hospital care, or unable to meet the complete cost of illness of long duration, or complicated by expensive needs.

In the determination as to what constitutes hospital indigency, I would like to emphasize the record of our hospitals in the past as to the part they have played in the life of their respective communities. In their unselfish devotion to the sick, in their interest in the training of personnel, in the promotion of research, and in the fostering of health knowledge, they have made glorious contributions. I would dare plead for a liberal interpretation of hospital indigency in keeping with our rich heritage of the past.

Volunteer Hospital Service for Women

BEATRICE FISCHER MEYER

THE interest in volunteer hospital service is shown all over the country; an interest, which is growing rapidly and leading to the development of a definite program to include volunteers within the institutional organization. The purpose of this discussion is to emphasize the need for active lay participation within the hospitals and to suggest practical ways and means to accomplish this participation, to better fulfill the needs of the particular institution served by the volunteers.

We are all volunteers, whether we serve as a board member or an active worker in the daily routine of the hospital. As a member of a committee, auxiliary, a guild or whatever name we choose to call this group, our service consists primarily of raising funds, purchasing new equipment for the hospital, interesting the community as a whole in the particular institution and serving on joint, lay and professional advisory committees to study and improve the service of that institution. Volunteers may be also considered as those persons who participate actively in the daily work of the hospital, in the clinics, in the wards, or wherever they may be useful and where the need for actual help exists.

Contribution of Volunteer Workers to Hospital Service

From my experience at my own institution, as well as in many institutions which I have been privileged to visit, there is the recognition of great need for lay participation at the present time with the possibility of an even greater need in the very near future. We all know that a hospital has certain objectives—the immediate care of the sick, the training of doctors, nurses, and social workers, a program of research, disease prevention, and community education in public health. An institution's endeavor is necessarily limited in many ways but with the assistance of an oriented, trained group of lay participants working as board members or as active volunteers enables that institution to better meet the problems and objectives inherent in its work. These volunteers rendering supplementary assistance under professional or salaried supervision, can contribute a very valuable service to the institution and to the community. This relationship between the professional or salaried worker and the volunteer has been definitely established and is being developed in a variety of ways in hospitals all over the country. In a program of such mutual cooperation between the professional or salaried worker and the volunteer, be she a board member or an active worker or both, mutual benefit is the result of this type of participation.

Conferring Definite Responsibilities on Volunteer Workers

In either situation, the need for additional help is recognized first, by the professional or salaried worker. Since medicine and surgery and the other sciences which are an integral part of a hospital are so highly specialized, it is obvious that no lay person can determine the amount of service necessary nor the way in which this service can be of greatest advantage to the institution. It is the personnel of the institution who must organize their work in such a way that volunteers will have a definite responsibility. The board member or the active volunteer must be oriented and trained and supervised by the professional and salaried group who should explain the correlation between the volunteer's responsibility in the work done by the department to which she is assigned, the department relationship to the institution and the hospital's relationship to the community. In this arrangement these lay participants, working either as board members or as active volunteers are actually an integral part of the hospital organization; they may be considered as non-sal-

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Presented before the Hospital Association of Northern New York.

aried employees, having a definite status in the department to which they are assigned. With the assistance of the active volunteer serving in a supplementary capacity under supervision the efficiency of this department is raised and the hospital is enabled to render additional service. By having a trained volunteer, the professional or salaried worker can delegate and supervise certain routine procedures to be done by the volunteer which will release the professional worker to spend a greater amount of time on the technical aspects of her work for which she has specific training.

Joint Responsibility of Salaried and Volunteer Worker

It is only with this type of joint responsibility that there can be a satisfactory relationship between the volunteer doing supplementary work and the salaried or professional member of the institution. Volunteer service is rendered as an avocation on a part time basis and it is vital that this lay person be made to feel needed and helpful in order to attain this satisfactory relationship. There are many hospitals which have considered a program of greater lay participation but having had previous unfortunate experiences with sporadic service rendered by volunteers; volunteers who had a dilettante attitude toward their work; volunteers who were working merely because their friends were doing so and it seemed to be a good idea at the moment provided it did not conflict with any social engagement; these hospitals having had such an experience are rather apprehensive of the success of having volunteers participate in their work. Perhaps, this experience can be explained as a result of both the institution and the volunteer failing to understand clearly the mutual responsibility necessary in such a relationship. If a volunteer reports for duty on time in a department to which she has been assigned and if the person in charge of the department has made no definite provision to include the volunteer's services, then it is obvious that that volunteer will feel that her assistance is not very important and that she might better utilize her time elsewhere. It is vital that the lay person have a definite pride in her assignment, realize the importance of her responsibility and understand that her work though limited in nature is important to the work of that department.

Volunteer Worker Complements But Does Not Supplant the Salaried Personnel

First of all, the relationship and the responsibility of the volunteer should be defined so that the salaried personnel of the institution understand that the volunteer is to complement, not to supplant the salaried worker. If a salaried or professional worker fears that the volunteer may be jeopardizing her livelihood then there will not be a satisfactory relationship. Such an erroneous conception on the part of the salaried worker can be avoided if it is clearly understood in the beginning that the volunteer is to render supplementary assistance within definite limitations as to the kind and type of responsibility to be delegated to the volunteer.

Of course, institutions must be careful to avoid exploiting their volunteers, using them instead of salaried workers. A very serious situation can arise if the hospital delegates functions of the salaried personnel to volunteers or if the hospital does not maintain adequate supervision. I know of a hospital in a relatively small community which felt the need for volunteers to conduct the visiting hours of that institution. A lay group offered their services and were welcomed with open arms by the administration, however, the administration wishing this service made no effort to train, or to explain hospital regulations to the volunteers who were to work there. As a result this group of volunteers made many serious errors and even gave out information to patients' families and visitors which jeopardized the hospital's relationship to its patients. Since they wore uniforms, they were frequently mistaken for salaried officials. When the volunteers recognized friends who were to be hospitalized the privacy of these patients was violated. As a result the hospital had to close one of its private floors because patients prefer to go to other hospitals where they might have the privacy and consideration which is inherently theirs. A hostess service may be very effective but only when the volunteers are given adequate supervision and training by a salaried worker in charge. In this instance the hospital was as much at fault as the volunteers who showed poor judgment.

Primary Objective of Volunteer Department

Now an independent relationship between a member of the salaried personnel and an individual volunteer, if it is successful, is the best advertisement for active lay participation. Immediately there is an increasing demand for additional volunteers in that and other departments of the hospital. If a volunteer enjoys her work and understands her serious responsibility, there will be numerous applicants available desirous of fulfilling the need for additional assistance. An organization of volunteers becomes necessary to supply both demands. The primary objective of a volunteer organization is to adapt itself to the needs of the particular institution it is to serve. It

is this department which facilitates the adjustment of the lay and salaried workers and brings their mutual desire to work into a closer and better relationship.

Preparedness and Volunteer Work in the Hospital

In addition to the many services rendered by the women's auxiliary, committee, board or guild, such an auxiliary group can, with the advice and cooperation of the administration, organize and direct the policies of such a volunteer department until the hospital itself can assume the complete responsibility. In addition to serving in this capacity, the members of the group may serve as active volunteers so that they will have a real working knowledge of the many problems which will be presented to them as board members. Particularly now there is a great need for closer cooperation between the community and the hospital.

This country has embarked on an enormous peace time preparation as we are all well aware. This program has certain aspects which will directly affect the hospitals: by June 1941, four thousand graduate nurses will be needed for defense preparation; each hospital has been asked to consider the number of doctors who might be released from their hospital work without lowering the standard of service of the institution; many industries are expanding rapidly and there are more positions available with higher salaries which may attract the non-skilled workers of the hospital so that there may be quite a salaried turnover problem; there are many similar situations which may arise as a result of this "preparedness" which will basically interfere with the normal present functioning of the hospitals. It is important that the volunteers be trained now and begin to serve in their own hospitals. A trained corps of volunteers would be better prepared to expand their services to fulfill an increasing demand should the need arise for them to assume greater responsibility. We must understand, however, that there will be a great difference in the type of service which at present is being rendered by volunteers and that which may in the future be expected from lay people. This difference between what volunteers did twenty-five years ago in hospitals and what they are doing now and will be doing in the future, is due to the tremendous progress made by all branches of medical science in this period and we must realize that our function will be limited; that our responsibility may not be as exciting nor as glamorous, but that there is work which we may and should do.

Types of Hospital Service Work Available to Active Volunteers

The types of work, which are at present available in these hospitals having active volunteers, vary depending on the need of the particular institution. Volunteer services may be roughly classified as either auxiliary or basic services. The auxiliary services, which means services not vital to the patient's well-being but which do assist greatly in facilitating his adjustment to the hospital and environment, are of tremendous assistance to the patient as well as to the doctor. A patient who is happy and contented is more liable to progress at a faster rate than a patient who is unhappy and maladjusted to his surroundings. The patients' library service, the diversional therapy service, the hostess service and the plant service rendered by volunteers are examples of the auxiliary type of service. At the Strong Memorial Hospital in Rochester as well as at Johns Hopkins Hospital in Baltimore, the volunteers have worked out a system of loaning plants to the patients similar to a library service. These volunteers also care for the plants and replace them as is necessary.

The basic services include: clinic assistants usually doing clerical work, ward service in which the volunteer assists the nursing service by doing simple routine things under supervision, that is, helping with the laundry, making a bed, answering the phone, fixing flowers, etc.; opportunities to do typing and routine clerical work in the offices; secretarial service provided the applicant has a knowledge of both stenography and typing; assisting in the playroom where children wait to see the doctor and in which they play prior to going home; some hospitals have play-ladies to amuse the children on the wards. This service of helping with the hospitalized children may cover a variety of activities. Often it is primarily for entertainment or amusement but sometimes it is of more practical advantage to the child. For example, according to the State law it is necessary that there be a certain number of hospitalized children before a teacher may be sent from a school. Frequently, there are a few children who are convalescing and who are too limited in number to warrant a school teacher and who might benefit by having lessons provided the doctor, nurse, and social worker think it advisable. If the child has lost time by being ill, he has a difficult adjustment from a health standpoint as well as psychologically. During the period he was ill, he was unable to maintain his study and as a result when he returns to school he is liable to be in a different grade from that of his friends with whom he started school. It is apparent, therefore,

that the volunteer under supervision may in certain instances act as a teacher to encourage the patient and assist him with his lessons.

Volunteer Workers in Technical Services

In some hospitals there are opportunities for volunteers with theoretical training to receive practical experience in the laboratories by doing supplementary service for an extended period of time. Although the experience will be limited, nevertheless, it is part of the educational program of the community in which a hospital having the proper facilities and adequate supervision may partake. Volunteers are also of great assistance on various projects; for example, if a volunteer has had a course in photography and if there is a department of illustration and photography within the institution, that volunteer may be of great assistance. Volunteers may also assist in various kinds of routine work under the supervision of the social service department. In communities having no motor corps available, volunteers may act as escorts for those patients who are required to come to the hospital for physiotherapy or heliotherapy treatments, particularly in cases where the patient lives at some distance, has no car of his own and is too handicapped to travel on the city transportation facilities, the volunteer can be of great service in making it possible for the patient to receive this treatment. Before any such arrangement can be made it would be necessary for the institution as well as the volunteer group to determine the kind of insurance necessary to protect the driver, the passenger, and the institution.

Volunteer Worker and Special Projects

Another basic service which might be rendered by volunteers is the assistance given to the hospital considering the feasibility of a certain project. Frequently on a research project which is supported by a limited endowment, the person in charge would like to determine whether some aspect of the problem may or may not be of importance, with the assistance of a trained volunteer this aspect can be investigated and if it has a definite bearing may then be put on a salaried basis. From this superficial description of the various types of services available to volunteers, obviously, an effort must be made to correlate volunteer's interest and theoretical training with the available opportunities for service. Since each hospital's volunteer department is adapted to fulfill its institutional needs, there will be many differences in the opportunities for service. At The New York Hospital in order to render more efficient service, we have developed an in-training system which means that each volunteer is trained into her particular job by the salaried or professional person whom she assists.

Mutual Benefits Accruing to Hospital and Volunteer Worker

Some of these services which I have described exist in many hospitals at the present time and they are considered of great value not only to the institution but also to the volunteer participating. To the institution the value is represented by having greater efficiency and better service to the patients and by bringing into closer relationship the institution and the community. To lay persons working as board members and as active volunteers, there are many benefits to be derived; the volunteer receives excellent training to equip her to act more intelligently as a board member and as a citizen in her community. There is a great personal feeling of unity to be gained by being one member of a large functioning organization. From her own experience the volunteer is better able to interpret to a much wider scale of the community the program of the hospital; she is constantly bringing a fresh and new viewpoint to the professional workers which aid them to keep their objectiveness. The volunteer feels a definite compensation in doing her job well and by adhering to her scheduled duties realizes the importance of her service. Briefly, these values are the things which are necessary and are of tremendous importance.

Many women who have been doing volunteer work in hospitals are being beseiged by organizations needing assistance at the present time. If they have additional time available they should cooperate and assist these organizations, however, it is important that the service to the hospitals be continued. First, because the hospitals form a most important line of defense and there must be no break in the continuity of their service. If a volunteer leaves or neglects her hospital work, a new person must be trained and that takes time. It is of vital importance that our hospital work continue to be our first consideration. We must not attempt to spread our activities too widely. It is far better to do one job well than to half way serve in many capacities.

In conclusion, therefore, may I reiterate the fact, that these hospitals cannot without your assistance ultimately meet the demand on their many services. As you are a necessary valued part of the institution you serve, it is only with your help as informed board members and as active volunteers that the hospitals may hope to meet their high objective for hospital service.

What a Hospital Can Do For a Community

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PERHAPS the best way in which to realize what the presence of a modern hospital means to the citizens of a community is to look back to the time when there was no place to which a sick man or woman could go to get special care. You will remember that when the good Samaritan found the man who had been beaten up and left bleeding on the Jericho road he had to leave him at an inn and had to pay the innkeeper to look after him. In the world of that day no one had yet conceived the idea of a hospital.

Early Hospital History

Hospitals began to be built in Europe about a thousand years ago. In 1931 when I was in London I went into a musty old stone building which once housed the first of these institutions to be founded in Britain. If bombs have not destroyed it, it stands today in much the same state as it was around 1100 A. D., when it was built. As I remember it, it consists of one bare room. There were no heating facilities, no kitchen, and of course, no bathroom or toilet or running water.

The few engravings we have of the early hospitals show a ward with two rows of beds, in each of which were two and sometimes even three patients. There were no trained nurses, and doubtless, as in many uncivilized parts of the world today, the patients had to depend on friends or relatives for food and water and care.

I am old enough to have seen the time when even the poorest excuses for hospitals were few and far between. I still remember well a day some fifty years ago when, as a child, I witnessed my first operation. It took place out of doors in a little village on the island of Oahu, some thirty miles from the now famous Waikiki Beach. A Hawaiian, trying to fish with dynamite, had blown his right hand to bits, and my father, who was government physician, had to amputate. Because no hospital was available the kitchen table was taken out into the yard and the man was laid on it. The most intelligent native available was the minister, so it fell to him to give the ether. Other natives assisted, and my mother was nurse. An interested crowd of Hawaiians looked on wonderingly. After the operation the man got up and walked home along a hot and dusty road. Patients were tough in those days—ambulances and taxis were unknown luxuries.

A few years later, when my father was near death with a double pneumonia, there was no hospital to take him in and no nurse or physician to help my mother care for him. She had to be nurse by day while a kindly schoolteacher took over the job at night.

Great Changes in Hospital Service

But time has passed and has wrought great changes everywhere. Two years ago when I went back to Hawaii to see my old home, I found nearby a fine modern hospital with laboratories and x-ray equipment, a nursing staff, and two able physicians. What a difference fifty years have made even on the edges of civilization!

But even in thirty-five years I have watched tremendous improvements come in the care of the sick. In 1905, when I went to work as an intern in a big city hospital, each ward, which housed thirty-two patients, had but one antiquated bathroom. There was no central heating and the city made no provision for laboratories. The food was awful, and the superintendent in charge of the health of 700 men and women was a burly old prize fighter whose one qualification for his job was that he had once been bodyguard to the city's boss.

Our x-ray department consisted of a little old coil which, when in a particularly obliging mood,

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might give us some idea of how a broken bone had been set, but when, occasionally, we interns became ambitious and tried to make it show us the inside of a chest or a stomach it promptly coughed and wheezed and burned out the tube.

In my ward I always had half a dozen people dying with tuberculosis. It was terrible to have them there, mixed in with the other patients, but there was no other place for them to go.

Naturally, in that day, when a man fell ill he kept away from a hospital as long as he could. During my comparatively short span of life I have watched this public dread of the hospital pass away, to be replaced by full confidence. In fact, today the pendulum has swung so far in the opposite direction that, where I work, we physicians often have to ask persons who are able to be out of bed to stay out of the hospital and to come to the clinic for their examinations so that beds will be left available for those patients who are seriously ill.

Essential Services the Hospital Provides

I wonder how many in the average community appreciate the number of services that the hospital of today stands ready to give to the patient when he comes in? In the first place, like a good hotel, a hospital furnishes lodging: a neat room, with a good clean bed, and if desired, a bath and toilet. It furnishes food and tries to serve it attractively so as to stimulate jaded appetites. A trained dietitian comes around each morning to help patient and physician in choosing food and in seeing to it that the diet is balanced and adequate to maintain life and health.

Competent nurses are supplied to take care of patients, and usually the hospital runs a school in which student nurses are trained. It must provide a home for these nurses and must feed them. Interns and residents are supplied so that physicians will always be on duty, and so that there will be someone to help the visiting staff of physicians. If the hospital is to maintain a high rating with the medical profession, provision must be made for giving these interns good graduate training. Obviously they must be housed and fed.

In every big hospital there must be good laboratories with a competent pathologist in charge, and there must be an up-to-date x-ray department manned by an expert staff. In many hospitals facilities for research are supplied to members of the staff or to the teachers in a nearby university.

There must, of course, be well-equipped and well-staffed operating rooms with the adjacent sterilizing and dressing rooms. There must be trained anesthetists on call by day and by night. There must be a pharmacy to supply medicines, and nowadays there must be equipment for the giving of oxygen to patients with pneumonia, and someone trained to keep the apparatus in order.

If during a patient's convalescence he becomes bored, a librarian will come by to supply him with books, or an expert in occupational therapy will drop in to teach him how to make a basket or weave a belt. If his joints get stiff a physiotherapist will come to massage them and to get them limbered up again.

If the patient runs out of money and gets to fretting and worrying over his bill and his hungry family at home, the social service department will come to his aid and find help for him somewhere.

There is a department to file and take care of his record after he leaves the hospital and goes home, and finally there is a highly important accounting department to make out his bill and to take care of all of the thousand and one expenses of the hospital.

Hospital Administration—The New Profession

Today the problems of running a great institution are so many and so difficult that a new profession of hospital administration has arisen, and men are being specially trained for the job. Not only must they grapple with the technical problems of housing, feeding and caring for the sick, but now, in this rapidly changing world, they must puzzle over new ways of financing the institution, new ways of supplying to persons of moderate income all the services that I have just described, and new ways of serving the attending physicians and dealing amicably with them.

Graduate Medical Education

In many communities today the hospital can be proud of the fact that with all its facilities it has much to do with keeping the local physicians up on their scientific toes. The service it offers enables the doctors to do good work; it helps in the making of diagnoses, and the hospital serves as a center for graduate education. Often, also, it serves as a center where fine public-spirited laymen and laywomen get together with similarly-minded physicians to work for the betterment of the health of the community. Without understanding, sympathetic, hard-working, generous and devoted lay people we physicians would never have been able to do what we have done for the hospitalization of suffering humanity.

A Prophecy

Prophecy is dangerous but sometimes amusing, so for a minute I will try to look into the future. There I think I see more efforts being made by hospitals to make the patient comfortable and to

remove all those annoyances that still plague him. I see air conditioning being used more widely, and I see more effort being made to combat noise. Some day a muffler, like the one on an automobile, will be in every window to keep out the noises of the street, and better soundproofing will keep out noises from the hall, the adjoining rooms, and the elevator shaft.

When the millenium comes the nurse who wakes a patient for anything but a fire will instantly be dismissed, and some method will be developed for finding out if a poor tired patient is sleeping besides banging the door, turning on the light, and shaking the bed!

Twice each year the superintendent, the head nurse, and the chief of medical staff will each have to live for a few days in a hospital room to see how easy or how difficult it is to get sleep and rest. In order to get new and better ideas on postoperative care the chief surgeon and the surgical resident will occasionally have to submit to an operation. I once knew a surgeon who prided himself on the strictness with which he kept water away from his patients for days after an operation. Then he fell ill himself and had to have his appendix out, and his surgeon, thinking to please, withheld all water for days. Finally the frantic patient got his brother to smuggle in to him several quarts of cold beer which were rapidly consumed without harmful effects. After that this surgeon's patients never went thirsty following an operation.

I suspect that some day in the future the heads of nurses' training schools will spend less time trying to make a poor doctor out of each nurse and more time trying to teach her the art of pleasing people and dealing tactfully with those who are crotchety and irritable. Instead of getting a written examination in medicine, surgery, anatomy and physiology as she now does, each probationer will be shut up for a day with some touchy old patient who explodes violently if not handled every minute with tact, good humor, real sympathy, and kindliness, and only those girls who leave him smiling and grateful at the end of the day will be allowed to move on up and begin their training for the care of the sick. Did I hear someone suggest that the same test might well be applied to would-be medical students? Yes, you are right; it could do a lot of good, and I would like to see it tried.

J. Dewey Lutes to Succeed Asa S. Bacon

J. Dewey Lutes, who for the past ten years has been superintendent of the Ravenswood Hospital, Chicago, has been appointed to the superintendency of the Presbyterian Hospital, Chicago, succeeding Asa S. Bacon who will retire on January 1.

Mr. Lutes, one of the best known hospital administrators of the Middle West, has spent almost twenty years in the field of hospital administration. For the past ten years he has been superintendent of Ravenswood Hospital, during which time the increased growth and popularity of this institution has made necessary the expansion of the present hospital plant, and improvements and new equipment have involved the expenditure of $250,000.

Mr. Lutes was one of the founders, and for several years the executive secretary of the American College of Hospital Administrators. He was one of the founders and organizers of the Chicago Hospital Council, and was its first president. He is vice-president of the Plan for Hospital Care, the Chicago plan for group hospital service. He is a trustee and former president of the Hospital Association of Illinois, and is a member of the House of Delegates of the American Hospital Association.

The Presbyterian Hospital could have made no wiser choice in the selection of a successor to Mr. Bacon, who has served that institution for forty-three years.

Quiet, competent, and efficient, Mr. Lutes brings to the Presbyterian Hospital a long record of successful accomplishments as a hospital administrator.

The 1941 Sectional Meetings of the American College of Surgeons

Hospital conferences will be held in connection with each of these meetings. Fellows of the College, members of the medical profession at large, and persons interested in the institutional care of the sick and injured, are invited to the Sectional Meetings; on the final evening of each meeting, a Meeting on Health Conservation to which the public is invited, will be held.

March 10, 11, 12—Minneapolis, Minnesota; Hotel Nicollet.
Participating States—Minnesota, North and South Dakota, Iowa, Nebraska, Montana, Kansas, Wisconsin, Manitoba.

March 17, 18, 19—Pittsburgh, Pennsylvania: Hotel William Penn.
Participating States—Pennsylvania, Ohio, Virginia, West Virginia, Delaware, Maryland, New Jersey, New York, District of Columbia.

March 26, 27, 28—Salt Lake City, Utah; Hotel Utah.
Participating States—Oregon, Washington, California, Nevada, Idaho, Wyoming, New Mexico, Arizona, Colorado, Montana, Utah.

Intern and Nurse Aid in Conservation of Hospital Equipment and Supplies

DENNETT L. RICHARDSON, M.D.

CONSERVATION of supplies and equipment in a hospital is always a great problem whether it be a large or small institution. There is, of course, a great deal of waste in ward supplies and equipment and this, to some extent, can be diminished by painstaking rules and regulations and the stimulation of the nurses and interns to cooperate.

When a person enters the hospital service it is wise at the very beginning to explain to him the importance of conserving hospital supplies and equipment and urging him to take good care of hospital property. This can be done in a friendly sort of manner without making him feel that his honesty is questioned. First impressions are very important and are usually quite lasting.

Securing Cooperation of Residents and Interns

It is perhaps best to separate the interns and nurses in discussing this problem of conservation of supplies and equipment because there are some differences in their respective responsibilities. In many hospitals a certain amount of equipment, such as microscopes, blood pipettes and equipment for taking blood specimens, is issued to the interns. The interns are responsible for their proper care and they must be returned at the end of their service unless the hospital sees fit to make a gift of it to them. As far as the intern is concerned, it is important to impress upon him not to be extravagant in the use of dressing materials at the same time to feel free to use the necessary amount. One of the reasons for wasting dressing materials is that the intern or nurse may do the dressing in the morning and later on the visiting physician may wish to take down the freshly dressed wound. It is possible to arrange the time for the dressings, or such portions of them as the visiting man is likely to want to inspect or do himself so that this wastage would not occur.

The Author

● **Dr. Dennett L. Richardson is the Medical Director of the Rhode Island Hospital, Providence, Rhode Island.**

The interns may cooperate by taking good care of the various kits for intravenous and other clinical work which is carried on in the wards. Often a good deal of breakage and loss is incurred in this equipment. (This applies to the nurses as well.) Another problem is the taking of kits or apparatus from one ward to be used on another ward. This is likely to lead to loss because it may not be returned or it may be returned in a damaged condition. Either each ward should be supplied with the necessary equipment of this kind and should not be taken from the ward without permission of the superintendent of nurses, or else such apparatus should be kept in a central supply room and requisitioned from there as needed on the ward. This practice is coming into more general use particularly in large hospitals. It is not possible, however, to carry this out in all kinds of medical nursing equipment but it is feasible and very helpful in certain cases.

Monthly Inventory

While it is some trouble to do so, it is extremely important to have a monthly inventory of all equipment and supplies on the ward. It is helpful to have this recorded in a special booklet which is so arranged that it covers a period of twelve months. The very fact that this is required, has a stimulating influence on the nurses to keep their equipment at a standard quantity. This inventory also helps the head nurse and the superintendent of nurses to requisition only supplies that are really needed. Of course, the needs of each ward varies from week to week and from month to month depending on the patients, whether surgical or medical, whether they are

very ill, or whether they require a great deal of attention. Adjustments to these could be easily agreed to by the superintendent of nurses and the head nurse.

To make a requisition, the head nurse should have available a form in which it is shown whether the article needed is a replacement or a new requirement. In the case of replacement many hospitals require that the condemned instrument or utensil be presented before replacement is made. This permits the superintendent of nurses to judge intelligently whether these materials are needed.

Loss Through Hiding Supplies for Future Use

Every superintendent of nurses has had the experience of head nurses putting away in some hiding place, linen and other ward equipment for future use and so that they will not run short in an emergency. Of course, this is commendable but it is not to be advised as it ties up too many supplies in the ward. The head nurse should keep very careful watch on her stock to the end that she will not run short of necessary supplies. Under ordinary circumstances, she can always get an emergency requisition filled rather promptly through the nursing office.

Certain Supplies to Be Kept Under Lock and Key

Because of the nature of things, it is not advisable to lock up all ward equipment but it is important and it is advisable to keep under lock and key the medicine closet, storage of dressings, and many other materials that might be easily appropriated. This is particularly true in large hospitals. There are plenty of opportunities for visitors to take things from the ward and it happens every now and then. This is not the only source of trouble because there are always certain members of the hospital personnel who will take hospital supplies when perhaps they would not do such a thing outside. It is important to keep locked up as many ward supplies as is feasible depending upon the character of storage space and the number of nurses who have access to this material.

Responsibility of the Head Nurse

In the last analysis it is the head nurse's duty to keep constant watch of ward supplies and equipment. Too often her time is taken up by nursing duties themselves or too much paper work. Actually she should have enough free time to observe what is going on as far as equipment and supplies are concerned but what is more important is the care that the patients are receiving by the nurses under her.

Keep Ward Equipment in Good Condition

The hospital management also is responsible for the conduct of good ward service. If, as sometimes happens, the requisitions are severely cut, the patients may suffer from the lack of necessary materials with which to work. This is likely to lead to hoarding. The ward should be kept in good condition because this helps to encourage good work on the part of the nurses. Often faucets are allowed to leak for weeks or even months before they are asked to be repaired. Locks may not be kept in good working order, or bed springs and mattresses may be neglected and not kept in good repair. If the management expects good work on the part of the nurses, they must cooperate so far as possible to keep the ward in good condition.

Stressing Education of Interns and Nurses in Conservation of Ward Equipment

Probably the most important effort in the conservation of supplies and equipment is the constant stress on the education of interns and nurses. This can be done in a manner that will stimulate real cooperation on their part. Of course, there are certain individuals so careless, so uncooperative that it may be necessary to take more drastic measures to obtain results. The idea is to make them feel that while they are working in the hospital they should take as much interest and care in the hospital's equipment as they would the care of their own personal belongings.

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Statistical Analysis of Out-Patients

Medical and Socio-Economic Characteristics

EMIL FRANKEL

THE Cooper Hospital at Camden, New Jersey, one of the large voluntary general hospitals in the southern part of the state, recently undertook a study of its out-patient department guided by a special committee composed of members of the medical and administrative staffs. As planned by the committee the survey was to determine: (1) whether the medical staff, with present equipment and personnel, is providing the best possible out-patient service to the community; (2) how the services regarding pre-ward and post-ward care may be improved; and (3) whether the patients served are entitled to gratuitous care.

Cases Covered in Survey

The survey covers 757 of the total individuals who attended the out-patient department of The Cooper Hospital between December 26, 1939, and August 29, 1940. All patients attending on specified days were included in the study in order to get a sample representative picture of the specialized services. The schedules giving information on the out-patient care and the socio-economic status of the patient were filled in by the social workers and associates of The Cooper Hospital, under the general direction of the superintendent, LeRoi A. Ayer.

The findings of this study reported upon here have answered some of the questions originally propounded and have thrown some light upon the functioning of a large and representative out-patient department and the patient's and the physician's current relation to it.

Of the 757 patients studied, 382 or 50.5 per cent had never been in the out-patient department before; 375 or 49.5 per cent were reopened or continued cases.

Among the 382 new patients, 121 (31.7 per cent) were males and 261 (68.3 per cent) females. Among the 375 old patients, 113 (30.1 per cent) were males and 262 (69.9 per cent) females.

The Author

● Emil Frankel is the Director of the Division of Statistics and Research of the New Jersey Department of Institutions and Agencies, Trenton, New Jersey.

In reporting the results of the statistical analysis some emphasis has been placed upon the 382 new admissions since they show what people are seeking clinic service for the first time, what physical conditions are causing them to seek aid, what their economic conditions are, and who are referring them to the clinic.

Referral of New Patients

The sources of referral of the 382 new out-patients may be summarized as follows:

PHYSICIANS	236	61.8 per cent
Family physicians	187	49.0 per cent
Other physicians	49	12.8 per cent
CLINICS OR WARDS OF OTHER HOSPITALS	12	3.1 per cent
PATIENTS THEMSELVES	104	27.2 per cent
OTHERS (including nurses 15, old age assistance 6, relief agencies 3, and friends 6)	30	7.9 per cent

Among the 382 new out-patient department admissions, 236 or 61.8 per cent were referred to the out-patient department by physicians. Of these 236 patients, 5 or 2.1 per cent of the patients were referred by physicians on the in-patient staff; 135 or 57.2 per cent of the patients were referred by physicians on the out-patient staff; 96 or 40.7 per cent of the patients were referred by physicians not on hospital staff.

Among the 236 patients referred by physicians, 187 or 79.2 per cent were reported as referred by family physicians.

	Patients Referred by All Physicians	Patients Referred by Family Physician
	236	187
On in-patient staff	5	4
On out-patient staff	135	103
Not on staff	96	80

It is quite probable that the majority of those referred by physicians on first visit are referred for consultation, or special laboratory or x-ray studies, or prenatal and obstetrical care.

A large number of physicians refer persons to the out-patient department, and few physicians refer many patients, indicating a widespread use of the clinic facilities. Physicians to the number of 112 were responsible for the referral of 236 new patients. Forty-five physicians of these 112, or 40.2 per cent were on the hospital out-patient staff, 4 or 3.6 per cent were on the hospital in-patient staff, and 63 or 56.2 per cent were not on the staff.

Of the 112 referring physicians, 61 or 54.5 per cent referred only 1 patient; 26 or 23.2 per cent referred 2 patients; 12 or 10.7 per cent referred 3 patients; 13 or 11.6 per cent referred from 4 to 16 patients.

Number of patients referred by individual physician	Physicians Referring —Specified Number of Patients— Total	On in-patient staff	On Out-patient staff	Not on staff
Total physicians	112	4	45	63
1 patient	61	3	15	43
2 patients	26	1	12	13
3 patients	12	..	8	4
4 patients	2	..	..	2
5 patients	4	..	4	..
6 patients	3	..	3	..
7 patients	2	..	1	1
11 patients	1	..	1	..
16 patients	1	..	1	..

Contact with Family Physician

In almost all of the new cases with family physicians, the physicians apparently had seen them recently and hence were in some contact with them. (Ninety of the 382 had no family physician and 48 did not answer the question.)

Of the 244 reporting, 145 or 59 per cent had seen their family physician during the week preceding admission to the clinic; 197 or 81 per cent during the three weeks preceding admission.

A table giving the time elapsing between the last visit to the family physician and the clinic registration will be found in the next column.

Time elapsing since last visit to family physician	New patients
Total	382
Less than one week	145
One week	25
Two weeks	21
Three weeks	6
One month	8
Two months	8
Three months	6
Four months	2
Five months	1
Six to eleven months	4
Twelve months and over	6
"Physician not seen recently"	12
Time not reported	48
No family physician	90

Clinics Attended

Of the 382 new cases studied, 109 or 28.5 per cent first entered medical clinics, general or specialized; 138 or 36.1 per cent surgical clinics, general or specialized; and 134 or 35.1 per cent gynecological or obstetrical clinics. One received dental care.

Clinic to which first admitted during survey	Total cases	New cases	Old cases
Total	757	382	375
Medical	297	109	188
Medical	105	62	43
Pediatric	43	25	18
Dermatology	53	14	39
Diabetic	25	1	24
Gastro-intestinal	19	3	16
Neurological	15	3	12
Allergy	33	1	32
Cardiac	4	..	4
Surgical	202	138	64
Surgical	68	35	33
Genito-urinary	9	8	1
Eye	55	50	5
Ear, nose, throat	49	28	21
Orthopedic	20	17	3
Cystoscopic	1	..	1
Obstetrical and Gynecological	247	134	113
Gynecological	37	3	34
Obstetrical	210	131	79
Treatment			
Dental	11	1	10

Previous Clinic Experience

Old patients in the study, either reopened or continued cases, numbered 375. On the schedules made out in the early months of the study, no report was made of the extent of the early clinic experiences. The later schedules, numbering 239, indicate how many separate general and specialized clinics each patient attended before the current attendance. The average (median) previous clinics attended is between 3 and 4.

Number of different clinics attended by persons during previous periods of care	Total		Male	Female
	Number	Per cent		
All patients	239	100.0	87	152
One clinic	29	12.1	12	17
Two clinics	58	24.3	27	31
Three clinics	45	18.8	13	32
Four clinics	39	16.3	13	26
Five clinics	30	12.6	12	18
Six clinics	19	7.9	4	15
Seven clinics	12	5.0	4	8
Eight clinics	4	1.7	1	3
Nine clinics	3	1.3	1	2

Even children under fifteen had extensive clinic experience as shown in the following table giving age by number of previous clinics attended.

Number of different clinics attended by persons during previous periods of care	Total	Age at time of study			
		Under 15 years	15-24 years	25-44 years	45 years and over
Total	239	48	31	65	95
One clinic	29	10	1	9	9
Two clinics	58	17	10	10	21
Three clinics	45	6	5	15	19
Four clinics	39	6	6	12	15
Five clinics	30	4	8	7	11
Six clinics	19	4	1	4	10
Seven clinics	12	..	..	6	6
Eight clinics	4	1	..	2	1
Nine clinics	3	..	..	..	3

Previous In-Patient Experience

Of the 382 new cases 36 or 9.4 per cent were known to have had previous ward care in the hospital. Of the 375 old cases 187 or 49.9 per cent had been in the wards at some time.

	New cases	Old cases
Total	382	375
Previous ward care	36	187
No previous ward care	328	178
Not stated	18	10

Age of All Patients in Survey

The 757 patients afford a cross section picture of the active clinic group. Males constituted 31 per cent of the total and females 69 per cent.

There were decided differences in the age distribution of the sexes.

Age at time of survey	Total	Male	Female
Total number	757	234	523
Per cent	100.0	100.0	100.0
Under 5 years	7.5	8.2	7.3
5 to 14 years	10.8	19.7	6.9
15 to 24 years	29.2	16.7	34.5
25 to 44 years	28.8	23.6	31.3
45 to 59 years	13.6	17.6	11.8
60 years and over	10.1	14.2	8.2

The general classification of the clinics in some measure explains the sex differences, with the obstetrical and gynecological services responsible for 239 of the total of 439 cases between 15 and 44 years of age in the survey.

Age at time of survey	Total	Medical Clinics	Surgical Clinics	Obstetrical and Gynecological Clinics	Dental Clinic
Total	757	297	202	247	11
Under 5 years	57	40	17	...	..
5 to 14 years	82	37	44	...	1
15 to 24 years	221	34	33	152	2
25 to 44 years	218	68	58	87	5
45 to 59 years	103	77	17	7	2
60 years and over	76	41	33	1	1

Economic Status

In a brief study such as this, when the incoming patient was necessarily interviewed hastily and no additional social investigation could be made of the family and its economic status, it is extremely difficult to get any detailed and accurate statistics on the income of the patient and his family.

In the dependent and marginal income groups with households made up of several families sharing their incomes, dividing their expenses, some on part time jobs, some on relief, a statistical analysis can give only the general picture. The eligibility of a patient for free clinic care can be determined only on a case by case basis.

If the patient is a member of a large family he may not know how much his brothers and sisters are making. Some are dependent on irregular days work. Others get a definite sum working "full week," but "full weeks" seldom occur. Those who are reported as "no income" include: some just laid off WPA, others "expecting to get WPA jobs next week," and others who have applied for relief.

Others with no income or extremely small incomes are living with relatives, themselves almost destitute and with large families, but for the moment at least sharing their house and their food with the patient and his immediate family.

Family Income and Clinic Attendance

Of the 382 new cases, financial data were reported more or less completely for 335. (No data were recorded for 47.) In this group of 335, were 28 with no income and 26 with incomes of less than $10 a week.

The median weekly family income for the 335

was $21.20.* The median varied with the size of the family as follows:

Number in family	*Median weekly income*
Total all families	$21.20
1 person	8.33
2 persons	20.00
3 persons	21.25
4 persons	25.68
5 persons	23.75
6 persons	25.00
7 to 14 persons	29.38

*Of the 335 giving information on income as recorded in these tables:
111 (33.1 per cent) represented families of two persons
68 (20.3 per cent) represented families of three persons
50 (14.9 per cent) represented families of four persons
34 (10.2 per cent) represented families of five persons
45 (13.4 per cent) represented families of six to fourteen persons
27 (8.1 per cent) represented single persons

Weekly family income of new patients	*Per cent of families with specified income*
Total families giving information	335
Percentage—total	100.0
No income	8.4
Under $5	1.5
$5 to $9	6.3
$10 to $14	13.1
$15 to $19	16.7
$20 to $24	17.3
$25 to $29	14.9
$30 and over	21.8

The income of a small proportion of these patients is such that they may be able to afford the office fee of one dollar of the general practitioner in The Cooper Hospital region, but they cannot pay fees for consultation or for any special diagnostic studies or for continued medical treatment.

According to its charter The Cooper Hospital makes no charge for clinic service. However, patients who receive prenatal supervision through the clinic are asked to pay a charge of $28 which includes 10 days of hospitalization and prenatal and postnatal care. This charge is collected on the installment plan through the clinic from approximately 80 per cent of the obstetrical patients. This accounts for the attendance at the clinic of many of the patients of the higher incomes, since the obstetrical patients make up one third of the total new cases studied.

Family Income and Referral by Physicians

A slightly higher percentage of the total cases with the higher incomes were referred by physicians than of the total patients with lower incomes. This may be because they are obstetrical patients seeking cheaper rates of hospitalization or patients known to the physicians who would have difficulty in paying the full private rate for the diagnostic and laboratory services needed. Many persons in the lowest income groups may not have their own physicians and may come directly to the clinic on their own initiative.

Of the 335 specifying incomes, 65 per cent were referred by physicians. Fifty-four per cent of those with no weekly incomes or incomes under $15, were referred by physicians in contrast to 73 per cent of those with incomes over $20.00.

Weekly family income of new patients	*Percentage of total patients with specified income referred by physician*
Total	65.1
No income	53.6
Under $15	54.3
$15 to $19.99	57.1
$20 to $24.99	79.3
($15 to $24.99)	(68.4)
$25 to $29.99	76.0
$30 and over	67.1

Inasmuch as the family income of the patients attending the out-patient department is at a low level, generally speaking, and the majority of them are referred by physicians it may be safe to assume that there is very little abuse of the out-patient department services on the part of the patients on their first visit. However, after the patient has established himself in the clinic, there is a tendency for him to acquire the "clinic habit."

This feature needs to be given careful consideration. Thought should also be given to the question as to the extent to which the out-patient department should serve as a diagnostic center for patients of the low income group who continue their medical treatment under the auspices of the family physician.

The detailed figures concerning weekly family income and the main sources of referral are given below:

Weekly family income of new patients	*Total*	*Patients referred by physicians*		*Other sources*
		On staff	*Not on staff*	
Total	382	140	96	146
No income	28	8	7	13
Under $5	5	2	..	3
$5 to $9	21	2	6	13
$10 to $14	44	18	10	16
$15 to $19	56	20	12	24
$20 to $24	58	24	22	12
$25 to $29	50	25	13	12
$30 to $34	37	21	6	10
$35 to $39	21	10	3	8
$40 and over	15	3	6	6
Not stated	47	7	11	29

Income from Public Funds

Of the 382 new patients, 65 reported the family was receiving funds from WPA, CCC, Old Age Assistance, or direct relief. A few families had aid from more than one such source. These family incomes may be divided as follows:

Weekly family income of new patients	*WPA and CCC*	*Old Age Assistance*	*Direct Relief*
Total	36	12	17
Under $5	..	2	..
$5 to $9	2	6	4
$10 to $14	20	..	4
$15 to $19	10	2	..
$20 to $24	2	..	1
$30 and over	2	..	..
Not stated	..	2	8

Income of Heads of Families

To get some further idea of the economic status of all the patients studied, a tabulation of the weekly amount received by the head of the household as reported on the schedules was tabulated.

The median (average) amount received by heads of households of families answering the question was $17.76. Among these heads were included 91 persons who were unemployed and received no income from WPA, relief, or other sources outside the family.

If these 91 unemployed heads of families who received no weekly income are excluded from the calculation and all heads are included who reported an income from any source the median is increased to $20.30.

Amounts per week of head of family of all patients studied	*Per cent of heads of family receiving specified amounts*
Total	100.0
No income—unemployed	12.1
Under $5	4.8
$5 to $9.99	6.5
$10 to $14.99	14.3
$15 to $19.99	11.4
$20 to $24.99	15.7
$25 to $29.99	12.7
$30 and over	10.3
Not reported	12.2

Of the total heads of families tabulated above, 61.3 per cent had private employment; 12.1 per cent were on WPA; 11.1 per cent were on relief; 3.4 per cent had funds from other sources; 12.1 per cent were unemployed and had no other incomes.

Occupational Status

The survey covered a total of 168 males and 446 females of working age (over 16 years old).

Of the 168 males, 76 or 45.3 per cent were employed; 14 or 8.3 per cent were reported as on WPA; 20 or 11.9 per cent were on relief; 58 or 34.5 per cent were unemployed.

Of the 106 males for whom a "usual" occupation was reported, 52 were unskilled workers; 31 skilled or semi-skilled workers; 12 were clerks; 6 were in school; and 5 were professional persons.

Among the 446 female patients, 322 housewives were reported; 51 were definitely employed; 2 were on WPA; 14 were receiving relief; and 57 were reported as unemployed. The preponderance of women in the survey is largely due to the fact that 210 were registered in the obstetrical clinic.

Living Accommodations

Of the 757 patients in the survey: 126 or 16.6 per cent lived in their own homes; 465 or 61.4 per cent lived in rented homes; 155 or 20.5 per cent were boarders or lodgers; 11 or 1.5 per cent did not report living conditions.

The 465 who lived in rented family dwellings paid varying amounts for rent. The largest number, 132 or 28 per cent paid from $15 to $19.99 per month—

11 or 2.4 per cent paid less than $5
26 or 5.6 per cent paid $5 to $9.99
84 or 18.1 per cent paid $10 to $14.99
132 or 28.4 per cent paid $15 to $19.99
80 or 17.2 per cent paid $20 to $24.99
108 or 23.2 per cent paid $25 and over
24 or 5.1 per cent did not report the amount paid

State-Wide Survey Planned

A plan for a state-wide study of the workings of out-patient departments in general hospitals in New Jersey is now being developed by the Hospital Relationships Committee of the Medical Society of New Jersey in cooperation with the New Jersey Hospital Association and the New Jersey State Dental Society.*

This study is intended to cover the following:

1 The services offered
2 The details of the organization of the staff which offers the services
3 The number of patients received in each division of the service
4 The methods of determining diagnoses and following up the patients, the treatments given, and the results attained
5 The costs of the varied services
6 The results attained
7 The abuses of the services

*Members representing the Medical Society of New Jersey: Henry B. Decker, Chairman; Spencer T. Snedecor, Vice-Chairman; Charles Hyman, George O'Hanlon, Edward A. Y. Schellenger, Earl H. Snavely, James H. Spencer, Jr., Thomas K. Lewis, Consultant, and Norman M. Scott, Secretary.
Member representing the New Jersey State Dental Society: Frank Houghton.
Members representing the New Jersey Hospital Association: LeRoi A. Ayer, Emil Frankel, John R. Howard, F. Stanley Howe, Joseph R. Morrow and Mary A. Roberts.

Blanket Buying

HOWARD A. MUNSON

IT is a very easy job to supply your institution with blankets—just choose a certain type and color from the first salesman and give him an order for a case or two! In due time they will arrive and be scattered through scores of rooms. And you will get the reaction in a year or so, if you stay that long!

Purchasing Agent Must Know the Answers

But we will say that you really intend to "buy" blankets. Ah, now you have a problem worthy of your best efforts. Shall they be all wool, part wool or cotton? Will they stand hard usage? Will they withstand repeated washings? Will the nap rapidly disappear and the blanket becomes hard and lifeless? You will try to find the answers to these questions and in order to give you the answers to them let us ask you a few more? Can you answer them?

1 What is the actual weight of the blanket you buy?

2 What is the actual size of your blankets?

3 Is the wool content absolutely free from shoddy and reworked stock?

4 What is the size of the warp threads?

5 How many threads to the inch are there in the warp?

6 How many threads to the inch are there in the filling?

7 With what are the blankets bound? And why this binding?

If you can give an accurate and satisfactory answer to these questions you are one in a thousand and no doubt doing an excellent job of buying blankets. If you cannot answer these questions you have something to learn about blankets.

Of course the type of blanket you buy will depend upon the use to which you will put it. But there are a few general principles which can be applied to all blankets.

Quality of Wool Used in Making Blankets

First let us give some thought to wool, of which there are many grades and types. The best is known as virgin wool or new wool never used before. There are many grades of this which are governed by the breed of sheep section of the country, pasturage storage, etc. These things the buyer of blankets cannot control but he can insist that his blankets be made from virgin wool and that it be the longest staple.

To show you the importance of demanding "virgin wool" let us look at some other types of wool. Many hundreds of "all wool" items today are made from reclaimed wool. This wool may be twenty-five years old and have gone through many processes. Some of its forms are called "choice wool clips" or "sweater clips" or "garnet stock" or "shoddy" and many other terms. It is still "all wool" and can be so labeled in any blanket or garment but with every garnetting its fibers become shorter and shorter until they have very little strength or wearing qualities.

Process of Blanket Manufacture

It would be a fine thing if every buyer of blankets could visit a first-class mill and see blankets made. It would not only assure him of the quality of wool used in his blankets, but would give him a better idea of what to ask for in his quest for the ideal blanket. Briefly, this is what he would see:

The originally dirty and greasy wool is thoroughly cleaned. Then it is put through a blending process where the different grades of wool are mixed for the desired result. The next step is carding—that is combing all the wool fibers so they run parallel to each other. This group of fibers must be spun and twisted down into the proper size yarn for weaving. Then the blanket takes shape in the weaving rooms. Yarns running lengthwise are called "warp" yarns. Those running crosswise are called "woof" or filler yarns.

The Author

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And it is the interweaving of these two yarns that form the blanket.

This produces a thick, coarse, and rather loosely woven fabric. It must be thoroughly cleansed and while it is wet it is put through a machine that forces it to shrink. This pulls the fibers in closely together and the better job done here, the less shrinkage you will get in your own laundry process.

Up until now this cloth has no appearance of a blanket and would not be much warmer than an old burlap bag. So the next process is "napping." The cloth passes through large cylinders which are covered with fine wires. As they revolve the wool fibers are picked up and this forms the nap. This gives the blanket both its beauty and its warmth.

Selecting the Kind of Blanket to Buy

What kind of blanket shall you buy? That is a hard question. All cotton perhaps for some types of duty. Or all wool, both in warp and filler yarns, for your best rooms. Or a combination of all wool filler with the warp threads all cotton. It is my opinion that this later type will be the best general blanket to use. Because:

1 The warp threads are the framework of the blanket and they must be strong. All cotton yarns of the proper size give the necessary strength.

2 You want enough wool to give the necessary warmth and 100 per cent woolen filler yarns of proper size will do the trick. There you have a combination of strength and warmth, without too much initial expense and without creating too much of a laundry problem.

Seven Characteristics of a Good Blanket

In buying this ideal blanket the buyer must necessarily base his judgment, to a large extent, upon appearances. And so let us list a few characteristics this blanket must possess. Please note that these following seven points answer the seven questions asked at the beginning of this article. And if you follow these seven standards in selecting your blankets they will look well and wear well for many years.

Weight

1 What of the weight? The weight of the blanket is determined by its construction and in this we are considering a blanket made with 100 per cent cotton warp threads and filled with 100 per cent virgin wool filler threads. And here is a caution—thousands of blankets are sold each year as "all wool" when what is really meant is that the filler is all wool. And "80 per cent wool blanket" may be 80 per cent wool in the filler, but is not really eighty per cent wool when one considers both warp and filling! If you are offered two blankets, one 60 by 84 and another 70 by 84 and they both weigh the same, the smaller blanket will be the best buy! It will necessarily have larger threads and more of them. A good 64 by 84 blanket should weigh three and one-half pounds.

Size

2 What of the size? For pity sakes do not buy blankets too small. You pay nearly as much as you do for the next size larger and your guests do not receive the real comfort the blanket should give. A blanket that just barely covers the sleeper's feet and will not tuck in at either side is poor economy and poor covering. There should be at least twelve inches to tuck in at the foot. And it should hang over the side of the bed at least eight inches on each side. This will make your twin bed blankets either 60 by 90 or 64 by 90. And the double bed size 70 by 90.

Wool Content

3 What of the wool content? The salesman must be willing to give a written guarantee that the wool content is virgin wool, fresh, well cleaned, and of the best grade, long fiber stock. Wear, appearance, warmth, and beauty all depend upon this characteristic being fulfilled.

Size of Wool Threads

4 What is the size of the warp threads? The warp in a blanket is what the steel superstructure is to a building—it acts as the framework which holds the blanket together. Many cheap blankets have cotton warp threads as small as No. 20. While in other blankets one may find yarns as large as No. 10. But properly made yarns, of long staple cotton, and No. 14 size will give excellent results.

Number of Warp Threads to the Inch

5 How many warp threads to the inch? It is important that the buyer know this because if the fabric is too loosely woven it will allow excessive wash-out of the wool fibers. A blanket as we are describing will have 40 "ends" or threads to the inch in the warp.

Number of Filler Threads to the Inch

6 How many filler threads to the inch? Here is an important question and to answer it we will have to describe another characteristic of our ideal blanket. First, it must have massiveness. That means that it must present a bulky appearance and at the same time be fluffy and soft and downy. And it is the treatment, in manufacture, that these filler yarns get that give us this massive appearance.

Then the blanket must have a high nap! And again it is these important filler yarns that take the napping. This high nap not only gives the blankets its appearance of luxurious beauty, but also gives it warmth. A blanket is warm because of the countless dead air spaces between the fibers of the nap. This forms a dead air space that retains warm air and repells cold air from the outside. And to give this kind of nap there should be approximately thirty-two filler threads to the inch. And these threads must be made of fine, long-staple wool that will hold in rough treatment and many washings.

Binding

7 What shall the binding be? Generally the blanket is bound with some sort of ribbon or it is whipstitched. The ribbon bindings are either satin or sateen. There may be arguments in favor of all of these and the use to which the blanket is put will influence your decision. If your requisition calls for an expensive blanket and money does not matter you will want an all wool blanket with a satin binding. Satin is a silk fabric with a very glossy finish and may be obtained in many beautiful colors. But it soils easily and is hard to clean. It also may look worn and faded before the blanket shows any wear.

A sateen binding is less expensive and looks well when new. But it has the same fault of getting soiled easily and being hard to wash. If the blanket is left in the machine long enough to get the sateen clean there will probably be considerable wear and injury to the blanket. And very quickly sateen wears threadbare and must be replaced.

Whipstitching has many things to commend it even if it does lack the beauty of the other bindings. It does not present any laundry problem, it looks well, and will wear the life of the blanket. And it is economical. It is by all counts the most practical for all general purpose blankets.

Care and Treatment of Blankets

We believe any article such as this on the purchase of blankets should also have a word about their care, especially their treatment in the laundry. The purchasing agent may use excellent judgment in buying the best blankets for his use, and yet the manager may get many complaints that the blankets are hard and stiff and have no nap and have shrunk all out of shape. The fault is more likely to be in the laundry than in the blanket. I have personally observed the blankets on the linen shelves of many institutions and many times they are pitiful things to behold. About all they add to a bed is a little color and a little weight — the qualities that gave them warmth have been taken out by improper laundry methods.

Rules to Observe in Laundering Blankets

Many institutions send their blankets to an outside laundry, but even in this case they can check upon the laundry procedure and insist that they be done properly. And it is without question the best policy to send out the expensive all wool blankets and have them dry cleaned. By following a few simple rules any laundry can retain the beauty and prolong the life of blankets.

1 The water should not be too hot—certainly not over 100 degrees F. And the water temperature should be kept uniform all through washing and rinsing. Water should enter the machine through a mixing tank and never should hot water run in one end and cold in the other.

2 The machine should be completely full of water and it should not be heavily loaded with blankets. Plenty of water and a minimum number of blankets.

3 A mild neutral soap should be used. Harsh soaps with much free alkali are death to wool fibers. Run the machine long enough to create a heavy suds before the blankets are added. And keep enough soap in the machine to maintain these suds all through the process.

4 The machine should not be run any longer than necessary. If they can be cleaned in two or three minutes so much the better. The more pounding and rubbing a blanket gets the more wool fibers will wash out and the more it will shrink.

5 The blankets should be dried immediately. Do not let wet blankets remain piled high in laundry baskets. Many modern blanket drying frames are excellent, but expensive. Inexpensive stretcher frames can be made by the institution. Or wood rods may be installed along the ceiling. Blankets should be dried in moderately warm temperatures and they should be draped over the drying rods in single folds. Some institutions have found that it is a paying proposition to install lines outdoors and have their blankets dried where the wind and sun can strike them. Examination of blankets dried in this way shows that they are sweet-smelling and very soft and fluffy.

We believe that with a little thought in purchasing and some care in handling and storing wool blankets it is possible for any institution to make decided savings on its blankets.

Socio-Economic Aspects of Convalescent Care

ELIZABETH G. GARDINER

ANY method of care which will more speedily return the patient to his or her usual function as worker or housewife is of especial interest today. This is true because of the high cost of illness to the patient, to the hospital, and to the community. Convalescent care skillfully devised to meet the need of each patient and effectively carried out is said to shorten the period of physical and mental inefficiency following acute illness or an exacerbation of a chronic illness. Such statements are usually based on a few illustrative cases rather than on careful studies of groups of patients with critical evaluation of the patient's physical recovery by the clinician and the social recovery by a medical social worker. Yet the illustrative cases are common enough in every day practice to make it easy to believe the general statement.

The Author

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Convalescent Care Defined

What is meant by convalescent care? Where and how can it be obtained? Convalescent care consists of creating around the patient a protected environment designed to meet his physical and mental needs and to require increasing activity as his strength returns. An eminent physician recently said, "The first principle of convalescent care is individualization of the patient through knowledge of his social status, personality, and the psychic processes that dominate him." This places the intangible in the patient's environment on the same level of importance as the concrete factors which have been emphasized in the Standards for Institutional Convalescent Care developed by the Public Health Committee of the New York Academy of Medicine some years ago.

Control of both the tangible and the intangible factors in the life of the patient is equally important in creating the atmosphere most conducive to return to the best attainable level of physical and mental efficiency. Various plans for establishing such conditions are being tried out for different types of patients in several communities. In many ways the most effective method is a well-planned and well-staffed institution on the cottage plan where the patient remains for as long a period as the physician in charge considers wise. An experimental variant of this is the Day Camp on an island in the East River, New York. The convalsecent day camp from which the patient goes home at night represents a compromise between institutional care and the second method, namely, adaptation of the patient's own home through devices like sending in a visiting housekeeper and often a public health nurse, at the same time placing the children in foster homes or with relatives for a short period. A third method occasionally tried is that of placing the patient himself in the home of a relative or in a boarding home. The following discussion will be limited to the desirability of the development of the care in well-planned and well-staffed institutions because it is the most effective way to obtain what the patient needs.

Advantages of a Convalescent Institution

Actually convalescent care is usually a pretty hit or miss affair occurring in the patient's home, where the habit of responsibility claims the patient while he is still so far from strong that even small undertakings loom large and forbidding. This retards recovery of full strength and delays return to wage earning, school, or housework. The medical staff of the London County Council began an experiment to find out whether it was also a cause of chronic illness. A special convalescent hospital at Margate, in Kent, was established in 1938 to give women and especially young women a long enough recovery period to enable them to reach their maximum strength and balance. The serious cost of caring for chronic illness led to this experiment in prevention.

The arguments advanced for creating this well-planned and well-equipped institution were that the cost of care there varied from one-half to two-thirds of the cost in a hospital for acute

patients and that the patient could be safely sent to the Margate establishment sooner than she could be discharged to her own home. The quality of after-care was known; therefore the possibility of readmissions to hospital due to misunderstanding directions or inability to carry them out was obviated. Little emphasis was laid on the psychological effect of relapse, but it is a familiar picture of discouragement or unspoken fear in the patient's eyes or the face of the husband. Patients under care in an out-patient department who were not showing improvement were also eligible for admission to the home if not in need of hospitalization. Some pre-operative patients were admitted for the double purpose of improving their operative risk and shortening the hospital period. All these types were considered as the reservoir of young adult patients who appear as the chronic sick years later, after having spent more or less time enroute in various stages of inefficiency. The argument for saving time and therefore money to the hospital is familiar. The reasoning regarding saving the communities' money is a longer view than many people are yet ready to accept.

When the Patient Returns to His Work Too Soon

Adequate convalescent care facilities for those recovering from serious illness save money and other values to smaller groups of people. Actually the employer, who takes back an employee who is still in a weakened condition, is apt to find a larger number of errors in the ex-patient's work than usual, an increased likelihood of friction in the plant owing to the hypersensitivity of the patient, and, if the ex-patient is shielded, a jealousy because of so-called "favoritism." The errors due to the shaky hand of a recently operated thyroid patient can be measured; the other elements are intangibles and more closely resemble grains of dust in the well oiled machinery. None of these losses is considered in adding up the expenses of too early return to work because they occur in a phase of the patient's life which is outside the field of the doctor's observation. Yet the additional energy, accuracy and stability which would accrue out of really adequate convalescent care are assets any employer wants in his staff.

When the Patient Returns to His Family Too Soon

Another small group of people who really gain by ample allowance for recovery care is the family of the patient; such gains are both direct and indirect. The half-way well person is soon overtired, irritated by things not usually noticed and apt to snap at the nearest person. Self-control is not fully reestablished so tears come easily in response to a joke which would normally have appeared humorous. The convalescent person has difficulty in sleeping and so disturbs others at night, and in turn resents the early rising and late retiring of the well members of the household. When a family lives in a small space like a city apartment or a two-room cabin in the country, these situations create tensions and unnecessary difficulties in the family circle. The unbelievable strength and resilience of the family bond has been once more proven in the tribulations of the last ten years, but that is no reason for placing strains on it which can be avoided by taking the patient outside of the home for a few weeks. These are somewhat negative statements. A more positive value to the family is the additional understanding of how to keep well brought to it by the patient who has sojourned in a really good convalescent institution.

Invalid Reactions

The gain to the patient in terms of general building up should not be overlooked simply because it cannot always be stated in terms of improved red blood count, etc. If the suggestions of Dr. O. H. Perry Pepper are carried out, we may some day be able to state the gains in terms of physiological chemistry.

Certainly the patient who has had adequate protection by other people during the period of weakness is much less apt to develop the protective attitudes we have been apt to lump under the name, invalid reactions. This would be true because the staff of a modern convalescent hospital, including the physician, should have a genuine insight into the sources of human behavior and skill in utilizing modern mental hygiene techniques to educate the patient back to normal living. Simply to have an occupational therapist does not constitute applying modern mental hygiene techniques. This therapist, like all the other members of the staff, must know the techniques of her crafts and also the art of helping the patient to increasing activity and self-direction, so that before the patient leaves supervision he or she is ready to assume responsibility because of understanding his strengths and his limitations. Thus the patient who has been given individualized care in the institution is ready for fuller living in the community and the family.

The value of well-planned and well-carried-out convalescent care is only beginning to be understood in a few places. This is true because much of the existing provision under the title of convalescent care is neither well planned nor well carried out. Let us evaluate the potentialities of convalescent care in the places where a high standard of work has been achieved rather than in the weaker places.

Residency in Hospital Administration

MAXWELL S. FRANK, M.D.

WITH the increasing importance, in recent years, of the profession of hospital administration, this calling requires well-trained individuals, fully aware of their responsibilities and imbued with a sincere desire to be of service to their communities. Today, the administration of even a comparatively small hospital is a complex and difficult task. The scope of the modern medical institution has been enlarging constantly so that its functions now include not only medical care but also scientific research and professional education. In addition to an adequate background of medical knowledge for this work, the administrator requires conspicuous executive talents and a thorough understanding of the numerous extra-medical problems of institutional management.

In order to provide accredited training facilities for properly qualified persons who desire to make a career of hospital administration, the position of resident in hospital administration was created in January, 1937, at the Hospital for Joint Diseases in New York City.[1]

Purview of the Hospital Administrator

The field of hospitiology has been defined as including "the art and science of (a) hospital service; (b) hospital administration; (c) the special architectural and engineering features involved in hospital planning, construction, and equipment."[2] It was believed that a definite plan of study, under the guidance of an experienced administrator, was a requisite for the proper comprehension of, and ultimately for active participation in, this profession.

The field of the hospital administrator has steadily been expanding, and it now encompasses many activities beyond the walls of the institution, which require him to keep abreast of the social and economic forces which mold the hospital's community and influence national trends. He must be aware of the constant progress in public health activities and of the possibility of impending changes in the basic nature of medical practice; the influence of the activities of philanthropic foundations and of governmental agencies upon medical care is also the concern of the hospital administrator. The effects upon the hospital of the relationships between the employer, the employee, and the community at large are of immediate and vital concern to hospitals and to their administrators. Every progressive administrator is cognizant of many other examples of the newer phases of hospital administration which now come within his purview.

The Author

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Planning the Residency in Administration

In planning the residency in hospital administration, it was believed that graduates in medicine, studying and working under the direction of the executive head of the hospital, would qualify ultimately as hospital administrators. The plan was to make of the resident "a student and a worker, under the direction of the usual department heads and the executive head."[1] An opportunity was offered to the successful candidate to study hospital administration at first hand, with complete access to all of the hospital's activities and departments, and with an ample opportunity to correlate this practical training with thorough study of the literature pertaining to hospital administration and its allied fields. The student was also guided in understanding the importance of the relationship of the hospital to the community which it serves, for it was realized that the broadening of the social viewpoint which would result from such studies would be of great significance to the administrative resident in his future career.

An attempt will be made in this study to record the activities and accomplishments of the student

[1]Golub, J. J.—"Residency in Hospital Administration, an Experiment in Training Graduates for This Special Field."—*Journal American Medical Association*, March 27, 1937, Vol. 108, pp. 1019-1022.

[2]Golub, J. J.—"Hospitiology, the Fields and Program of Hospital Service, Hospital Administration, and Hospital Planning."—*HOSPITALS*, August, 1937, pp. 32-37.

in hospital administration during the two years of his residency. It must necessarily be somewhat incomplete, for the schedule of study as originally outlined visualized a three-year course of integrated activities.

The Hospital for Joint Diseases is a voluntary, general hospital, treating patients with all types of conditions, except contagious, mental, and obstetrical. Its 355 beds are about equally divided among patients with orthopedic, surgical, and general diseases. Sixty beds, located in the country branch of the hospital, are used for the care of convalescent children. Of the remaining beds, approximately 115 are allocated to private patients and 180 to ward patients. Almost 750 patients are treated daily in the out-patient department. The hospital is approved by the Council on Medical Education and Hospitals of the American Medical Association for general internship, and for residencies in orthopedic surgery. The student in administration is thus afforded the opportunity of learning the details of organization and management of a general and specialty voluntary hospital which serves both private and ward patients and which has a large out-patient department and a convalescent unit.

Apprentice Administrator in the Hospital

The apprentice in administration resides at the hospital and the amount of time which he may spend in study is therefore unlimited. He is on 24-hour duty and is promptly apprised of all hospital activities. He is authorized to study and supervise the activities of every department of the hospital, under the supervision of the executive director, who, in frequent conferences, outlines the plan and scope of the student's activities and checks the extent and thoroughness of his studies. In addition, the resident submits to the director, in writing, reports and monthly summaries of activities indicative of his progress in the assimilation of the principles and purposes of hospital administration and management. Original problems are delegated to the resident for study and report; if his recommendations are accepted, he is instructed to implement and follow through the procedures required for their practical application.

The resident attends as many extramural hospital meetings as are consistent with his knowledge of the special fields. He attends meetings of local, state, and national hospital associations, and of specialized groups, such as hospital accountants, hotel managers, dietitians, stewards, laundry managers, etc. He is expected to keep abreast of general medical progress by attending, whenever possible, the meetings of the county and state medical associations and of the American Medical Association. Visits to other hospitals constitute another important phase of his training. In addition, the resident has had the unusual opportunity of studying the progress of the erection of a new out-patient building, from the period of the fund-raising campaign and the details of the blueprint stage to its actual construction. His introduction to employee policies and relationships was gained during the nation-wide labor unrest in 1937, which affected all institutions in greater or less degree.

First Year's Curriculum

The formal curriculum for the first year included the study of the following aspects of the hospital's activities:

1 Admitting department
2 House staff
3 Emergency and ambulance service
4 Deaths and autopsies
5 Record department and library
6 Surgical operating-rooms and anesthesia service
7 Nursing service
8 Social service

"It is in the admitting department that the patient usually gains his first and lasting impressions of the hospital."[3] This department was studied first because of the basic nature of its work and also because it is generally considered to be the most logical point of approach to the study of hospital administration. The resident observed and supervised the organization and policies of the admitting department. Almost immediately he learned to appreciate the close relationship which exists between the admitting office and the other departments of the hospital. He cooperated with the members of the house staff in their efforts to secure authorizations for post-mortem examinations. In a paper published in *HOSPITALS*,[4] an analysis was made of the causes underlying the successes and failures in obtaining necropsies.

The larger problems of the hospital's admission policies, including districting, eligibility requirements, financial arrangements, and investigation of the social background of patients, were studied. The control and management of patients with contagious diseases, of reservation of accommo-

3 "Hospital Organization and Management," p. 140. M. T. MacEachern, M.D., first ed., Physician's Record Co., Chicago, 1935

4 Frank, Maxwell S., "A Study of Deaths and Necropsies at the Hospital for Joint Diseases," *HOSPITALS*, May 1938, pp. 86-90

dations for private admissions, of the length of the waiting list, and of the distribution of the patients to the various services were supervised. In this work the resident in administration occasionally undertook the duties of admitting physician in order to expedite the routing of patients. The periodic statistical reports prepared by the admitting office were studied, particular emphasis being placed upon the compilation and utilization of the daily census.

Guiding and Supervising the Hospital's Interns and Residents

One of the duties of the administrative resident was the supervision and guidance of the residents and interns. The rules and regulations pertaining to the house staff were enforced, vacation schedules arranged, and problems affecting the house staff discussed with the director of the hospital. A program of intern health was organized, which included entrance and subsequent periodic physical examinations. Procedures designed to offer the new intern a comprehensive introduction to the hospital, were instituted. Members of the house staff were encouraged to bring their problems to the resident in administration for discussion and assistance.

Studying the Organization and Functions of the Records Department

The organization and functions of the medical records department were studied in considerable detail. A comprehensive report of policies relating to records and their uses, including suggestions for changes in established procedures, was submitted to the director. Special emphasis was placed upon complete and prompt charting and abstracting of records. At the request of the director, several original statistical studies were prepared from the files in the record department, including a comparison of length of hospital stay, income, source of referral, etc., of "regular" semi-private patients and of Associated Hospital Service patients, and a study of surgery performed between 7 p. m. and 7 a. m.

Post-Mortem Examinations

The performance of post-mortem examinations was supervised from an administrative viewpoint, and constant efforts were made to emphasize to the members of the visiting and resident staffs the importance of securing the necessary authorizations. Insistence upon the timely performance of necropsies resulted in considerable good will on the part of undertakers toward the hospital, with a resultant, directly related, increase in necropsy percentage. The necessity for prompt and accurate signing of death certificates was emphasized to the members of the house staff. Proper procedure in the reporting of medical examiners' cases was carefully supervised. Sudden deaths in any part of the hospital were investigated and reports of the findings submitted to the director.

Operating-Rooms and Anesthesia Service

The resident in administration also studied and cooperated in the supervision of the surgical operating-rooms and of the anesthesia service. This aspect of his training included cooperation with the operating room committee of the medical board, supervision of the preparation of the schedules of operations, checks on periodic bacteriological examination of materials used in the operating rooms, supervision of blood transfusions and donors, investigation of night and emergency operations, and study of the many other factors involved in the proper functioning of the operating rooms. The schedule of the nurse-anesthetists and the condition of the anesthesia apparatus were supervised. Close cooperation was effected with the operating room supervisor in the control and reduction of operative infections. A survey was made of the operating load at various periods, which resulted in considerable equalization of the demands made upon the anesthesia and the operating room personnel.

Nursing Department

Study of the nursing department included its organization, standards, and service to the patients. Frequent rounds through the hospital with the superintendent of nurses were of value in elucidating nursing problems, which were subsequently submitted, with recommendations, to the director. Ratio of nurses to patients, hours of actual bedside nursing, schedules and distribution of nursing personnel, and the relationship of the nursing department to other phases of hospital activity, were studied. Legislation affecting nursing was carefully reviewed and publications of local and national nursing organizations studied.

Medical Social Work

No longer can the treatment of the patient be considered as ended when he leaves the hospital. Through medical social work, the socio-economic background of the patient is investigated soon after admission, and a thorough, long-range follow-up program is instituted in order to continue the benefits of hospitalization. Through close cooperation with its personnel, the aims and organization of the hospital's modern, active social service department were studied. Home visits were made with medical social workers. The relationships of the social service department to

the medical staff and to ward and clinic patients and their families were followed. Study was made of the broader community responsibilities of this department and of its contacts with other social agencies. Various social studies were made, some of which were presented at meetings of the appropriate hospital committees.

Integrating the Activities of the Hospital

The manifold activities of a hospital, when properly integrated, constitute the hospital; this point should be remembered despite the arbitrary separation of departments for the purposes of this report. At first, the resident's progress was necessarily slow and halting, but under the guidance of the director and the department heads, the originally indistinct picture came into focus and the relationships of the parts to the whole became clear. The gears began to mesh, as it were, and there developed a realization of the role of the administrator as coordinator, guide, and executive. Each department assumed its correct relationship, and before long every part of the hospital became the object of special studies. Although every department was studied separately under the immediate guidance of its head, the larger view, which had unfolded, was retained.

Special acknowledgment should be made of the great educational value of being permitted access to the incoming and outgoing mail in the director's office. The horizon of hospital administration receded continually as new problems in and outside of the institution passed in review through this correspondence. A sense of proportion developed and the approach to the solution of seemingly insurmountable situations became more orderly and direct. Above all, the resident gained a wholesome respect for the dignity and responsibility of the administrator and for the seemingly limitless sphere of his activities.

Second Year's Study

During the second year of the residency special attention was devoted to a study of the following departments:

1 Laboratories
2 X-ray
3 Pharmacy
4 Adjunct diagnostic and therapeutic departments
5 Out-patient department
6 Dietary service
7 Housekeeping and laundry
8 Engineering and maintenance

For the sake of brevity, these departments will be discussed in as few words as possible, but it should be remembered that an entire year was spent in their detailed study.

Hospital Laboratories

The scope of a hospital's laboratories extends beyond its routine duties into the field of research. A large staff of technicians and dieners meets the varied needs of the departments of pathology, bacteriology, chemistry, and hematology. The training of interns in the various technical procedures and organization of their schedules, to avoid undue emphasis upon routine laboratory work to the detriment of clinical bedside duties, was supervised. The need for special apparatus, animals, etc., was carefully checked with the individual department heads. The work schedules of the laboratory personnel received attention in order to ensure adequate coverage at all times.

The department of x-ray and photography has a particularly important function in a hospital with a large traumatic service. Its facilities must be immediately available at all times. The promptness with which reports are supplied to the medical staff for their guidance in diagnosis and treatment may frequently spell the difference between success and failure in the outcome of their efforts. An understanding of the relationship of this department to the other divisions of the hospital was obtained.

Hospital Pharmacy

A hospital pharmacy presents problems quite unlike those of the "corner drug store" with which almost all physicians are familiar. Emphasis in the hospital is upon service rather than profits. Purchasing must be done skilfully, and many products must be manufactured so that costs may be kept within budgetary bounds. Stocks, floor and out-patient service, safeguarding of narcotic and alcohol supplies, charges for medications to private, semi-private and ward patients, all of these aspects and many others of the hospital pharmacy were carefully noted.

Studying Auxiliary Services

Other professional services included many of the hospital's auxiliary departments, for example, physical therapy and hydrotherapy, electrocardiography, basal metabolism, oxygen therapy, brace shop, etc. The organization required to ensure the highest standards of these various types of service, as well as charges, personnel problems, and the condition of the equipment, were thoroughly studied and reports of the findings periodically submitted to the director for discussion and criticism.

Out-Patient Department

The out-patient department assures continuity of treatment before the patient enters the hospital and after he leaves it. Frequently the ministrations of its personnel make hospitalization unnecessary, permitting the potential hospital patient to continue at his occupation instead of becoming a charge upon society. A large out-patient department, which treats between 700 and 800 patients daily, is a complex organization, requiring a high degree of skilful control and a clear definition of policy. Every day brings its new problems, which often tax the ingenuity and initiative of the administrator. Standards of service must be maintained on a level with the best types of private medical care. Overcrowding must be prevented in order to avoid deterioration of service and replacement of quality by mere quantity of medical care. Constant diligence must be exercised to restrict admission to those applicants who are economically eligible for this type of service. Schedules of service for the visiting staff must be prepared and attendance checked. The admission of patients recommended for hospital care must be expedited. Regular reports must be prepared for the director and for various agencies. Much time was spent by the resident in the out-patient department; a sociological and statistical study of one clinic was accepted for publication.[5]

Food Service Study

A high percentage of the hospital's expenditures is accounted for by the purchase of food. With thousands of meals being served daily to all types of individuals, both sick and well, the responsibilities and problems of the dietary department are among those requiring much time and consideration. Studies were made, in cooperation with the dietitian, of food costs, planning of menus, types of service, food clinics, quality of provisions, personnel schedules, departmental administration, sanitation, etc. The invaluable training received in this department was amplified by reviews of the literature related to the purchase, preparation, and service of food.

Hospital Housekeeping

Patients judge a hospital nearly as much by its housekeeping and cleanliness as by its standards of medical service. Modern housekeeping and laundry service are sciences requiring a high degree of organization for their proper functioning; the earlier haphazard methods employed in these departments have no place in the modern hospital. By close association with the department heads, the resident in administration gained much important practical insight into these divisions of "the back of the house."

Engine Room and Its Problems

While an untrained person cannot be expected to possess more than a rather superfiicial knowledge of the technical aspects of engineering, he must acquire sufficient background in order to work intelligently and in close cooperation with the hospital engineer, and be aware, more than superficially, of the mechanical aspects of the institution. Major economies can be effected by judicial appraisal of the factors involved in plant maintenance. Should the hospital produce its own electrical power or should it purchase it from the local utility company? If the former, should coal, gas, or oil be used as fuel? Are Diesel engines or steam turbines more economical? The advisability of the purchase and use of costly meters to indicate the degree of consumption of electricity and other utilities by the various departments in the hospital is another problem calling for fine judgment on the part of the administrator. Care of the hospital grounds, heating, ventilation and air-conditioning, fire-prevention, repairs and painting—these are some of the engineering responsibilities which come within the purview of the hospital administrator. He must be able to read the monthly log submitted to him by his engineer, and to suggest better or less costly methods of obtaining equivalent results. The only way to learn the details of the engineering department is by working under the chief engineer and supplementing the practical knowledge thus gained with study of the technical literature. In this manner the resident assimilated whatever knowledge he could.

Using Hospital Literature

A study of hospital literature has helped to give the resident a more comprehensive view of the field of hospital organization and administration, and the acquisition of a steadily growing personal library and of a carefully indexed file of reprints contribute toward keeping him aware of the recent advances and expert opinions in his profession.

It is not sufficient for an administrative resident merely to observe and absorb; he must be willing also to contribute something to his institution—by means of his initiative, cooperation with and inspiration to others, by research and the publication of worth while papers in hospital journals, and by devotion to his duty at all times. He

[5]Frank, Maxwell S. "The Luetic Clinic in the Out-Patient Department of the Hospital for Joint Diseases," *HOSPITALS*, February 1939, pp. 53-56.

is inspired and stimulated by his preceptor, the director of the hospital, whose guidance is indispensable in insuring correct procedure and good policy. The establishment of good administrative habits and the practice of clear administrative thinking and planning thereby becomes part of the student; the solid foundation thus established early in his career can serve him well in his future responsibilities.

The resident in administration must be able to call to the attention of the administrator whatever, from his daily rounds, he considers to be of importance, directly or indirectly, to the hospital. Friendships and personalities must be subordinated to the welfare of the patients and of the community which the hospital serves. The student soon learns that the welfare of the patients who have entrusted themselves to the hospital must take precedence over all other considerations. The hospital's educational functions, its research program, and its personnel relationships must all be considered in the light of returning the patient to his normal state of health as quickly and as efficiently as possible. When the resident has learned this lesson, he has proven himself worthy of kinship with those administrators whose example he keeps constantly before him.

New Ice-Making Machine for Hospitals

Alice G. Henninger, superintendent of the Huntington Memorial Hospital, Pasadena, California, has recently installed a new ice-making unit that presents many advantages, and has successfully solved the hospital's ice supply problems.

This hospital of 200 beds had, for the past eighteen years, an ammonia and brine central refrigerating system. This system supplied three walkin boxes for the kitchen and five reach-in boxes for the diet kitchens. It also produced 1500 lbs. of ice daily which was crushed and used for water pitchers, ice caps, etc. A two-fold problem resulted—one of producing satisfactory refrigeration for the refrigerators themselves and the other that of providing chipped or cracked ice. After giving the subject of refrigeration much study, it was found that the ammonia and brine method of effecting refrigeration was expensive in the consumption of power and maintenance.

It was then decided to install separate electric refrigerating units in each of the walk-in boxes in the kitchen and also in the reach-in boxes in the diet kitchens. These units are all fed from two centrally located compressors near the engineering department. These electric units are very satisfactory in producing the desired refrigeration and we are finding electricity and maintenance costs are lessened.

To find a solution for producing the 1500 lbs. of ice daily needed for ice water, ice caps, etc., was a more difficult problem to solve. We were much intrigued by the ice cubes that are being used so extensively in hotels and cocktail bars and found that machinery for producing 1500 lbs. could easily be installed. Our main objection to the cube ice was the cost of labor required to remove the cubes and refill the containers. Also the cost of upkeep on containers, we ascertained was quite considerable, over a period of years. Therefore, when we discovered that there was a method of producing ice with the ice flake machine, which is put out by a well-known refrigerating firm, we were much interested. The machinery includes a large revolving cylinder which is internally refrigerated and the external surface of the cylinder runs through a bath of water which congeals on the cylinder, and the teeth of the opposing surface literally shaves the ice from the cylinder. The ice thus shaven runs down an incline and into a large insulated box (holds 2000 lbs.). This machine is capable of making about 1800 lbs. of ice in 24 hours. The ice flakes are ready for use in ice caps or for cooling water in pitchers without further chipping or breaking.

Upon checking the cost of this ice we found that the machine uses about 2.8 kilowatts per hour and produces in this time 75 lbs. of ice. The machine completely installed, in our case, cost approximately $2,500. We estimate the cost of ice production per ton as follows:

Power	.615
Water	.061
Depreciation and maintenance of equipment....	1.00 or about $1.70 per ton

The advantage of this product is that it produces ice in a very sanitary way, no handling is necessary, and also that it is much less expensive.

Rational Drug Therapy in Hospitals

M. S. DOOLEY, M.D.; E. C. REIFENSTEIN, M.D.

THERE is far too little correlation between pharmacology and drug therapy at the bedside. The main reasons are defective teaching, a major weakness in medical education which fails to keep physicians informed about the pharmacological action and standard nomenclature of drugs prescribed. As students and, subsequently, as practitioners they had, and have the ordeal of trying to learn myriads of drugs. Experience teaches that they miss adequate knowledge of the few of merit. Such thinly spread teaching and learning about hosts of drugs permeates the whole curriculum and medical practice in spite of available scientific criteria for charting drug actions in the clinic which make it possible, in most instances, to shun useless and irrational therapy. The results are particularly reflected in notoriously disreputable pharmacy stocks. Although the plan of operation here outlined is perhaps unique in some respects, it is not intended to convey the impression that other efforts at drug reforms with considerable success have not been made.

Pharmacy Stocking of Questionable Drugs

Fantus,[1] Irons,[2] Lewis,[3] Stoner,[4] and Solomon,[5] among others, have written extensively of the urgent need of reform in the kinds and qualities of hospital drugs. Irons says:

> "The shelves of some hospital pharmacies remind one of the exhibits of proprietary medicines in a chain-drug-soda-foundtain-lunchroom."

Many pharmacies, luxurious in appointments, stock scores of questionable drugs. Faced with these facts, the University Hospital Pharmacy Committee discarded a total of about 1000 preperations. These items, official and otherwise, were not necessarily condemned because simple or complex; nor necessarily because they were useless, for some were, in a measure, useful; but because they were either harmful, valueless, or poor duplications of approved items. Only pseudoscience and tradition had declared them indispensable.

This is not a purely local problem since reports from some of the best hospitals indicate a similar condition. For example, among the best hospitals, one had 1500 drugs in stock, another 1600; others reported removals of 300 to 500.

How Many Different Drugs Can the Hospital Staff Intelligently Prescribe?

The average hospital staff, though conscious of this compromising drug status, feels itself without means or obligation to change the conditions which make such stocks possible, vaguely considering it the duty of the hospital, the pharmacy committee, or the pharmacist. The thought that staff members might be wholly to blame for any unworthy drug getting into, or remaining in stock, seems to be a novel idea. The usual contributions of staff members to the size and efficiency of pharmacy stocks, are limited to an unchallenged prescribing of drugs, meager knowledge of many of which they have obtained largely from the detail man.

The question was—Could a hospital staff intelligently prescribe 1600, 1500 or even 500 drugs, including diagnostic agents? After thorough investigation, the staff concluded that this was an impossibility. It led to publication of the "Interns Handbook,"[19] featuring a sharply limited list of "approved" drugs carefully chosen for pharmaceutic adaptability, pharmacological soundness, therapeutic and diagnostic usefulness, from the

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U. S. P., N. F., New and Nonofficial Remedies and Useful Drugs. Its scope is far less than that of any of these texts.

But any attempt to restrict drug scope is faced with the fact that medicine enjoys its enviable status because it has kept fairly clear of narrowing dogma, cultism, and regimentation. Cushing[6] warned, as do others from time to time, of arbitrary restrictions, governmental and otherwise, as a solution of medical problems. Stoner,[4a] McLean (quoted by Stoner) and Roger Lee,[7] while deploring much done in the name of drug therapy, fear the inflexibilities of standardization lest as Lee says:

> ". . . too implicit acceptance of any standard leads . . . to unintelligent labor of the treadmill type and to discouragement of initiative."

These views deserve utmost consideration because of the earnest efforts of their authors for better drug therapy. However, a flexible plan of restriction, if pursued educationally, is possible and not incompatible with intelligent choice. One of the earliest pioneers in this direction was Hatcher[8] and his group who not only took an advanced step in rationalizing drug stocks in their institution, but incidentally secured great reduction in drug costs.

How the Drug Scope is Controlled

The approved drug stock in our hospital is controlled by the pharmacy medical director and the pharmacy committee in consultation with the directors of medicine and surgery. A full time pharmacist maintains elegance, freshness and potency of stocks, exactness of solutions, sterilizes, preserves, and carefully labels within that scope. His duties do not include attempts to pass upon therapeutic questions; for this latter he is grateful. On this basis the pharmacy is no longer a vague institution to staff members but is regarded as a part of the hospital laboratory system, not serving merely at the dead level of pill counting, dispensing mostly package nostrums, specialties and proprietaries. Staff members have acquired the habit of visiting the pharmacy for special information as they do the roentgen ray and other departments.

Such a plan, ten years in operation, based on ward experiences, consultations, staff conferences, country-wide inquiries, has obviated, almost entirely, the bad features of unrestricted drug prescribing without cramping initiative While widely gathered information has been helpful to this end, the major factor has been exacting medical control of our own drug stock. Therapeutic advance in consonance with diagnosis, we believe, awaits general adoption of this or a similar plan.

In the beginning, the staff approved the scope of drugs, as presented, without serious thought of the effect on time worn prescribing habits; it is one thing to adopt a restricted drug list, quite another to maintain it, especially in an open-staff hospital. Some staff members have adjusted slowly to the new drug scope—not in hostility, but as if it were somebody's "hobby." To repeat, some physicians decry any drug restriction as a violation of the time-honored dictum that therapeutic emancipation requires fullest freedom in prescribing. But those using such nondescript drugs as were discarded, would be overcredulous and would prescribe almost without aid of science. Maintenance requires the constant scrutiny of the director and pharmacy committee, conversant with pharmacy, able to brush aside the pseudoscience of the drug trade, and, above all, to speak the language of the therapeutist. Obviously, it is unsafe to go into the drug market without pharmacological and therapeutic knowledge.

Administrative difficulties have been more fancied than real. Administrative and nursing support has been limited only by our ability to impress objectives with clarity.

On occasion it is necessary to show, contrary to unfounded claims, nonexistence of specifics for certain diseases. It is patiently insisted that as yet no such specifics exist and that a credulous urge for them only brings useless nostrums into being, to the neglect of important general hygienic care.

Use of Unapproved Drugs

From our pharmacy, unapproved drugs are issued to ward patients only on the approval of attendings. But this does not cause delays. The pharmacist honors an order, in the absence of an attending, but only after reminding the resident of its status. Sometimes directly, sometimes through the pharmacist, the medical director suggests approved items; changes to the latter being rarely refused. Needless to say, this plan has strongly influenced private patient therapy. Also excessive costs of unapproved items purchased outside for private patients, discourage ill-founded medications and stock accumulations. Thus without coercive intent, an ideal is held before the prescriber.

New drugs, issued after the usual reminder, come at once before the pharmacy committee. Findings are the basis for joint approval or rejection with the service involved. Out of incidental discussions, clinical and other forms of

research often arise. Pertinent bulletins are posted from time to time in the staff room.

Joint Laboratory and Clinical Evaluation of New Drugs

As implied above, cooperative research and clinical investigations, involving drugs, are encouraged. For such, reliable drugs are indispensable, as Gold[9] has well stated. Leake[10] also urges joint laboratory and clinical evaluation of new drugs, or new uses of old ones, remarking that "quick clinical results pass too near the morgue." Evidence is accumulating that the Food and Drug Administration, using the new *Federal Food, Drug, and Cosmetic Act* (*Section* 505) is exercising restrictions against unwarranted haste in introducing new drugs.

Adherence to fixed complex formulas is a regrettable tradition, perpetuating, as it does, useless, and therefore, dangerous medicinals. Preparations are even prescribed by numbers in many hospitals. Complex preparations are sold by drug houses under the sales device of meaningless "drummed-in" names, an evil deeply rooted in medical credulity and docility, and not, as is widely claimed, in drug manfacturing.

Synthetic Drugs

Many old and new synthetic drugs are too toxic to be exploited without thorough testing, as evidenced by recent tragic events. Careful studies even of inert, or nearly inert, drugs are equally essential if patients are not to be uselessly medicated or to suffer dangerous neglect. Gunn and among others, Sollmann,[11] states that for lack of controls much so-called clinical proving of drugs is worthless.

To meet this situation in England, the Medical Research Council has a Therapeutic Trials Committee[12] which discourages the risks of new drugs, on a "hunch" or a "tip." Loevenhart earlier suggested a similar plan in this country. The National Institute of Health renders such service as to certain biological and antiluetic medicinals as does the U.S.P. Anti-Anemia Products Advisory Board for liver and stomach extracts, and the Vitamin Advisory Board for vitamins. The Federal Food and Drug Administration and the Council on Pharmacy and Chemistry are constantly rendering valuable services. Even if imperfect, administrative provisions of the Food, Drug and Cosmetic law mentioned above, are deserving of active medical support.

Amounting to a near national scandal for many years and having its roots largely in medical passiveness was the inadequacy of the old *Food and Drugs Act.* Although, as Cramp[13] pointed out, only eleven drugs and their derviatives were subject to more than minor restrictions under the 1906 Act, there were no effective steps at correction until 1938, owing to frustration at the hands of those who stood to profit from weaknesses of the law. Even the long over-due 1938 law, enacted in response to popular clamor over scores of tragic deaths from poorly controlled drug exploitation, is not without its "jokers," all because of the persistent lobbying of self-interest groups and the ineffectual action of organized medicine.

Drug Deletions

In still another direction can we note bad results of our faulty system. In the setting up of the scope of official drugs, physicians lend insufficient guidance. Pharmacists, unguided by the best thought in therapeutics, oppose deletions of outworn drugs, as happened in the last (XI) U.S.P. revision. The 119 deletions from the U.S.P. X (more deserved deletion) were opposed in many instances by the five pharmacists on the Scope Committee because "physicians frequently prescribed" them.[14] An intelligent vote on admissions or deletions to the U.S.P. requires pharmacological and therapeutic knowledge rather than statistics on how frequently prescribed. Continued medical indifference has left decisions on such matters to pharmacists without such knowledge. Hence physicians, not pharmacists, retard modernization of the U.S.P. drug scope. Rational revision would direct that pharmacists vote only on pharmaceutic necessities (vehicles, flavors, solvents, excipients, bases, and standards for these), and physicians only on therapeutic and diagnostic agents.

Drug Names

Another very troublesome problem in hospital pharmacies as well as in U.S.P. revision, is drug names. This is the bane even of the drug trade.

Table 1

Phenolphthalein Laxative	
Casophen	Laxagen
Children's Laxative Candies	Laxothalen
Chocolax	Lax-Thelein Wafers
Coco-Lax Wafers	Mercolax Wafers
Dublax	Ovolax
Fenolets	Phenolax Wafers
Hepatophen Wafoids	Phenotone
Homolax	Tabalax
Laxative Pastilles	Thaletts
Laxine	Thalosen
Ex-Lax	

Adapted from Council on Pharmacy and Chemistry, Journal of the American Medical Association 97:1386, 1931

Table 2**

Thiamin Hydrochloride (Vitamin B)

Betaxin	Betalin-S	Vitabee
Betabione	Berocca	Spinalbee
Crysto-Vibex	Betamine	Bewon

Adapted from Drug and Therapeutic Survey, Inc., 1:61, 1938

Here again physicians are innocently at fault since by continuing to prescrbie drugs under trade names instead of U.S.P., N.F. and N.N.R or chemical names, they perpetuate unwholesome commercial abuses to the detriment of their patients and the confusion of hospital records.

If it is important for physicians to adhere to standard terminology in anatomy, physiology, diagnosis, names of diseases, causes of death, etc., is it unimportant as to drugs? Numerous "aliases" are complacently accepted even for official drugs despite grave inherent dangers, for example, farastan, agostan, atophan, guaiasan, etc., for cincophen.

Here are some of the proprietary names applied to Phenolphthalein U.S.P. with certainty of confusing physicians but, especially, nurses. Other more recent examples are seen in Tables 2 and 3.

The accompanying prescription (Table 4), written in Detroit, in which methenamine appears five different times, shows the extent of the absurdity that can arise from a multiplicity of names for a single drug. The grave dangers of such confusion to the patient are obvious.

Unlimited scope and confused nomenclature not only lower the standards for undergraduates in medicine, but also vitiates intern, nurse, dental and veterinary education. To conform to a wide range of ill-founded drug therapy, nursing schools, as do medical schools, attempt (but fail) to teach effectively the names, the natures, actions, uses, doses and dangers of a host of drugs (nurses are supposed to learn many more than medical students). The latter, in 150 to 250 hours of intensive study in laboratory and many more hours in clinics, can learn adequately far less than 200 drugs; what then can nurses, with little background, learn about them in their allotted 30 to 45 hours for materia medica? Poor prescribing thus impairs the general efficiency of hospital service.

Table 3**

Ascorbic Acid (Vitamin C)

Cebione	Cenolate	Synorbic
Cevalin	Vitacee	Concemin C
		Cevatine

Adapted from Drug and Therapeutic Survey, Inc., 1:61, 1938

Many State Boards ignore pharmacology, materia medica, prescription writing, and drug therapy, in licensing examinations, thus encouraging cultism and the future doctor to forget his pharmacology. In National Board Examinations, candidates with one year internship, almost always use trade names in answering questions involving drugs. Reasons: Association with ill-informed and careless teachers, reading poorly edited medical literature and contacts with detail men. All of this perpetuates confusion in clinics, in the record room, in nursing, in dentistry, and pharmacy, adding indefensibly to dangers to patients and to profits.[15,16] The National Board itself, and other examining boards, at times, encourage this condition by the use of trade names in formulating questions.

Table 4

	Grains
Urotropin	5
Formin	5
Cystogen	5
Hexamethylenetetramine	5
Another brand	5
Mix and divide into 5 capsules	

Arch. Derm. and Syph. 31:1, 1935

Perhaps the unenviable status of pharmacology in the medical curriculum, as described by Edmunds,[17] arises from its lack of leadership in these vital matters. The same criticism may perhaps justly be laid against the American Society for Pharmacology and Experimental Therapeutics because of its disregard of standard drug and chemical nomenclature.

As implied above, there are also economic abuses involved. Dr. Robert A. Hatcher estimated that a New York hospital could save thirty thousand dollars annually by the adoption of a plan for a restricted drug scope which had been submitted. On a similar question we quote a recent statement by Stainsby: "In the year following the adoption of the regulations of the committee, the New York Hospital Pharmacy was able to make a $50,000 better showing even though the hospital treated more patients that year than ever before."[18] Although drugs are not usually the largest cost item in illness (prescriptions do often cost more than the doctor), patients complain of it. Such things can start lay investigations, ill-advised legislation, engender loss of confidence in the physician and hospital, and encourage the medical mediocrity of socialized medicine and even quackery. Charity boards, in caring for the indigent, find welfare budgets loaded unnecessarily with drug costs. Medical advisory service is responsible.

Such prescribing is little better in its results than the much deplored rising tide of self-medication for which physicians are also largely responsible through passing out proprietary drug samples or having patients ask for them by names at the corner drug store.

Drug therapy in private practice is our concern here only to the extent that it greatly influences hospital therapy. The commercial persuasiveness of drug interests, including "ethical" abstracting periodicals, reaches the physician in the privacy of his consulting room. The young doctor may get his needed self-confidence from the "You know, doctor, . . ." literature of these firms and the studied deference, "therapeutic" information, and samples, from the detail man. The consultant, too, must not show ignorance of the latest, newest preparations nor reluctance to apply them though they may be only older drugs under new, uninformative names, or the ultra-new, the efficiency and toxic effects of which may as yet be little known. Let the reader evaluate the effect of this background on hospital prescribing.

The ideals discussed are hard to maintain but they are the price of dependable drugs. More than 30 years of well-directed effort at protection of the physician and the public by the Council on Pharmacy and Chemistry, has made notable progress toward rational drug therapy, although tradition and credulity still sway physicians entering the profession from ten years of unparalleled intensity of preparation. Though the profession is solely to blame for abuses, a great number of physicians still do not even ask if the newer drugs and preparations they accept and use are "Council Accepted."

Physicians indivdually are, however, handicapped in meeting this problem because organized medicine does little about it. The Council on Medical Education and Hospitals, the American Association of Medical Colleges, the American College of Physicians, the American College of Surgeons, the International College of Anesthetists, the American Hospital Association, the Commission on Graduate Medical Education, and other organizations interested in better medical education, and numerous other medical organizations, are, with one exception (Council on Pharmacy and Chemistry), doing a minimum to combat the evil. An all around agreement on a teaching program in support of a limited scope of drugs similar to that in "Useful Drugs" or the "Interns' Handbook" and adherence to standard nomenclature, would soon bring about great improvement.

A successful attack would have to reach far beyond the field of formal medical education. Medical publishing of all kinds and drug manufacturing interests must be induced to cooperate.

Summary

1 Drug scopes and drug medication have been stated to be far from ideal. The problem can be simplified to the advantage of the patient, the budget, and the physician, the essential being sustained interest in careful drug selection.

2 Physicians individually and collectively are seen to be solely responsible and they only can correct the abuse.

3 Comprehensive plans for correction have been described.

4 Suggestions have been made of ways in which medical progress could be made on the basis of rationalizing hospital drug therapy.

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*As the work progressed, the Chairman of the Pharmacy Committee was appointed Medical Director of the Pharmacy.

Centralized Medical Record Transcription

W. B. OSGOOD, M.D.

THE 6,226 registered hospitals of the United States admitted 9,879,244 patients during the year 1939.[1] When one considers the investment in time and money to complete the medical records of these patients, the importance of the medical record department becomes evident. Much has been written about the perfect record, the ideal record room, and the modern classification of nomenclature. This article simply relates the story of an idea, a change, and the result. Although this study centers on the production of hospital records, the principles involved are general in their application.

Scientific management has been an aid to industry and its workers. Business has benefited because of increased production and lower unit costs. The worker has gained because of an adjustment of wages and improved working conditions. In Taylor's classical study in the steel mill[2] the average loading of pig iron was increased from 12.5 to 47.5 long tons per man per day. The workers in this group accomplished more work with less fatigue at a sixy per cent increase in wages. This early accomplishment has been repeated many times and in many places, resulting in mutual benefit to employer and employee.

These same principles are applicable to hospital management. The administrator is operating a business. This business employs people. These people must produce in terms of service at a minimum cost. Our problems are similar. Is the laundry operating at the proper level of efficiency? Are we receiving full value for the purchase dollar? Should clerk A receive the same wage as clerk B? Does the record room really need another person? It was this last question which led us to consider certain applications of scientific management.

As in other departments, the record room sought the return of employees removed during the years of retrenchment. During the peaks of increased work requests were made for additional workers. Were these requests justifiable? There was no unit of measure to guide a reply. In fact, we were much the same as Taylor when first he became exasperated in trying to find just what a day's work should be.

The Author

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Importance of Careful Preparation of the Clinical Record

To ascertain the answers to these questions would mean interference with the department and possible change within it. Any such procedure would have to be considered with great caution as our records have always been carefully prepared, and the clinicians have been proud of them. Dr. Henry A. Christian[3] summarized it well in his twenty-fourth annual report:

> "From the beginning the history, physical examination, and the various notes made constituting the patient's house record, all have been typed; this has rendered our records easy of study and has stimulated an unusual degree of completeness of detail in them, valuable both in the study of progress of disease in the individual patient, as the patient returns from time to time to the hospital, and in the preparation of clinical studies for publication. From these data, already important facts of medical interest have been contributed to medical literature. In few places, if any, have better clinical records been accumulated than those of the Peter Bent Brigham Hospital, a thing commented on by visitors from other clinics at home and abroad."

To tamper with the production of such traditional documents might justly provoke criticism.

Increasing Production and Maintaining Work at Current Levels

It did seem possible, however, to maintain the same high standards and yet speed up the production, and possibly lower the cost. At least, the matter deserved study to determine whether we were using "the one best way." In making such a study it is not considered well to take one from within the organization to do it. The result is not always satisfactory because a fellow employee may be known as to his weaknesses, to his lack of authority, or to his possible favoritism toward those who are demanding. The desirable person is one having authority, capable of winning cooperation, and able to devote the necessary time for an adequate study. The local manager of the company from which we had purchased our transcribing equipment was consulted. As he seemed to fulfill the above requirements, he was given the full cooperation of the administration, with authority to include all the departments and personnel necessary to the study. The survey was completed in an orderly and business-like manner with an unusual deftness in accomplishing the end against odds.

It was believed by some that an attempt was being made to mechanize loyal employees. These workers and others before them had done their work satisfactorily for many years past. Why change now? To bring in outsiders who knew little about hospital records was to employ prejudiced investigators whose criticism would be unfair. Such ideas spread, gaining the sympathy of some staff members. There was resistance to the plan.

It is natural for human beings to resist change. A worker who through years of practice has developed his way of doing a piece of work, requires some force to make a change effective, even though he believes the new method better. Again, the most controlled person does not like to have his work analyzed too closely. Perhaps certain weaknesses might be revealed resulting in demotion or discharge. These reactions are common to all of us in varying degrees.

Section of the central transcribing bureau

The recommendations made in their report seemed sound, practical, and attainable. They were advantageous to the hospital and to the workers. The hospital would gain by increased production with the maintenance of work at a current level, and a monetary saving. By means of a daily report the superintendent would know the operating efficiency of the department. In turn, the worker would have pride in doing satisfactory work with efficiently operating equipment. The working conditions were to be more convenient and pleasant. In order that these predictions might be realized, confidence was again placed in the surveyors, and their recommendations accepted and followed exactly.

Procedures Followed in Centralized Transcription

As previously stated our house records, except for the laboratory sheets and nurses' notes, are typed. The data obtained by the doctor are dictated. This is accomplished satisfactorily by the dictating machine, which is an electrically driven recording device developed on the principles of the early gramophone. Our eight dictating machines are located in the offices of the ward and private services, operating room, and the x-ray and pathological departments. The hospital has much to gain by the use of this equipment. The busy house officer dictates at any time convenient to him, the surgeon completes his operative note immediately following the operation, and the roentgenologist records his findings directly as he interprets the x-ray plates.

The cylinders upon which this dictated material has been recorded are next transcribed by record room stenographers. Each secretary has a transcribing machine, similar in construction to the dictating unit, which reproduces for her exactly what the doctor has said. The organization of the transcribing department varies according to the size of the hospital. It may be a simple one requiring only a single stenographer, or be more complex necessitating a central bureau.

In realizing success in the completion of any plan, the worker is the most important factor. A letter may have been dictated properly, but fail in perfection if the typist is careless in the preparation. It is recognized that the worker selected must be competent and skillful. Our secretaries were found to have unusual potential ability. The average rate of transcription was 159 lines per hour. However, their production was impaired

by the poorly operating equipment, decentralized arrangement, and inefficient flow of work.

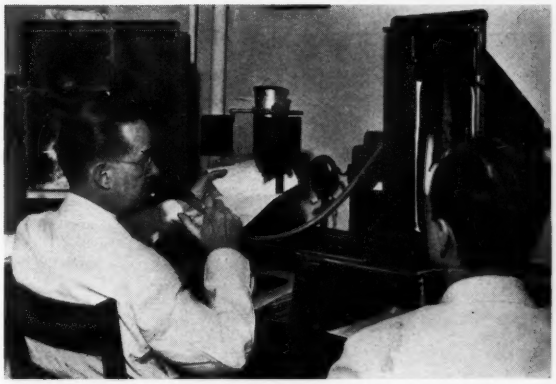
Our First Step

Our first step, therefore, was to repair the better and replace the older machines with new and modern ones. This done, improved work resulted through efficient operation, and a psychological lift was noted throughout the department. Good and complete equipment is necessary for good work.

However, this requisite determines only part of the operating efficiency of a department. To say that an airplane travels two hundred miles means little. To add that the distance was covered in two hours with a safe landing has comparative meaning. So, in addition to seven stenographers and well operating equipment, we needed the proper office arrangement to permit a rapid flow of work.

Our original layout was a decentralized one. Six of the secretaries worked in four offices located near the wards, and a seventh had a desk in the main record room. Each girl was assigned to do the stenographic work of one particular ward or part of it, resulting in specialized transcription. Much of her time was spent in doing messenger work, answering the telephone and inquiries of callers. Supervision was limited. This decentralized set-up did not lend to efficient work.

The stenographers are now located in one office in the administration building. The equipment is arranged to permit the expeditious handling



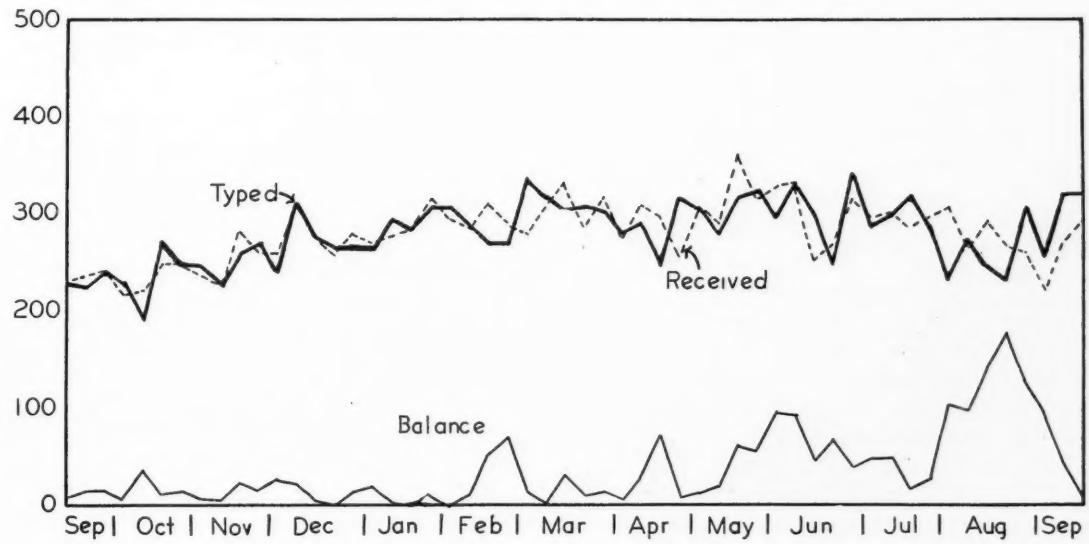
Roentgenologist dictating as he interprets films

of work. All work is now pooled among the secretaries, this being distributed by a supervisor. Her desk is near the door and she alone answers telephone calls and all other inquiries. The collecting and distributing of cylinders and completed work is done by a messenger girl. To minimize fatigue, fifteen-minute rest periods are provided morning and afternoon, and the serving of tea is permitted during the latter recess. This centralized set-up has resulted in better performance.

Results

What are the results? In general, all stenographers are doing an equal amount of work without interruption. Miss A is not required to complete more cylinders than Miss B because of any variance in ward census. The delegating of minor and clerical duties to a messenger provides additional hours of actual typing. The new routing

Three Curves Showing Total Number of Record Units Received and Typed Weekly, and Balance Remaining Untyped Each Saturday, From Sept. 16, 1939 to Sept. 21, 1940.



of work shortens the traffic lanes about forty per cent. Therefore, in terms of hours and wages, centralization has reduced the personnel by one and one-half persons.

The daily report of the central transcribing bureau prepared by the supervisor for the superintendent has been an important contribution. It consists of two parts. The first has to do with production in the record room itself by tabulating the number of cylinders and written histories received and typed, and the daily balance of those remaining unfinished. The second part lists the doctors with the number of cylinders dictated by each one the previous day. Thus the operating rate of the department can be determined, the proficiency of the individual worker can be compared, and the uncooperative doctor can be detected.

DAILY REPORT—CENTRAL TRANSCRIBING BUREAU

Date: October 4, 1940

	Dictated Cylinders	*Written Histories*
Balance brought forward	0	0
Incoming	28	6
Total	28	6
Typed	28	5
Balance	0	1

Operators	*Typed Cyls.*	*Time Typing*	*Written Histories No.*	*Written Histories No. Pages*
A	9	25 min.	1	3
B	11	2 hrs. 15 min.	3	17
C	8	1 hr. 10 min.	1	7

Operators	*Front Sheets*	*Note Time*	*Supervision Miscellaneous*
A	.....	1 hr. 40 min.	.....
B	.....	10 min.	.....
C	.....	45 min.	.....

TOTALS—

Dictators	*Dictated Cyls.*
Dr. X	10
Dr. Y	9
Dr. Z	9

To obtain a real perspective a chart has been prepared. As there are no previous figures for comparison, it must be judged on its own merits. The chart consists of three curves showing the total number of record units received and typed weekly, and the balance remaining untyped each Saturday, from September 16, 1939, to September 21, 1940. The term unit denotes either cylinder or written history. The latter is written by the medical student, submitted to the house officer for corrections and approval, and then typed directly. To dictate these would mean duplication of work.

The study of these observations has been divided into three periods: the first from September to January; the second from January to May; and the third from May to September twenty-first. As it reveals, the first four months were relatively calm. There was a general increase in the amount of work received, but the production kept apace. A slight flurry is evident during the week ending October 14, due to the holiday on October 12.

The work continued at the same high level during the next four months. Two new peaks are recognized. In endeavoring to explain the first, that of February 24, two factors are present: one the holiday of February 22, and the other a particular house officer. This house officer was one of those men whose records are detailed and voluminous. He was about to leave on a vacation, and his dictation represented 20 per cent of the total work received the week ending February 17. Another holiday was responsible for the large balance of April 20.

During the last period, the weekly balance reached normal limits only twice. This was due to a temporary lowering of production. In May the typing of all x-ray reports became a function of the bureau. This work had preference, and introduced new terms. The annual vacations began in June and continued through the summer months. With the return to the full quota of secretaries, production resumed its usual rate, the weekly balance curve descended during September, reaching normal on the twenty-first, and remained within these limits at the present time.

The recent addition of pathological reports, as well as the above x-ray work, has completed the centralization of medical record transcription. The improvement in performance which has resulted encourages the extension of the plan to other stenographic departments of the hospital.

Conclusions

Our experience has shown that the principles of scientific management can be applied successfully to hospital administration.

Valuable counsel can be obtained from surveys conducted by a reputable sales organization.

A centralized transcribing bureau is advantageous to a hospital medical record room. It makes possible the pooling of all work, with the equal distribution of labor among the stenographers. The employment of a messenger frees the secretaries of minor duties, thus providing a savings in time and wages.

The preparation of current reports and charts of production aid the superintendent in the efficient operation of the department.

References

1 The *Journal of the American Medical Association*, Vol. 114, p. 1157 (March 30, 1940).
2 R. M. Barnes, "Motion and Time Study," p. 11, John Wiley and Sons, Inc., New York, 1937.
3 "Twenty-fourth Annual Report of the Peter Bent Brigham Hospital for the Year 1937," p. 105.

Radiation Therapy Department of Queens General Hospital

MARCUS D. KOGEL, M.D.; LEONARD B. GOLDMAN, M.D.

THE radiation therapy department of the Queens General Hospital functions as a diagnostic and therapeutic service for both in-patient and out-patient services. It has facilities for the treatment with x-ray or radium of both benign and malignant conditions. Patients are referred to this department from the various services of the hospital.

The patients have usually received a complete workup before referral to this department. Nevertheless a history is again taken, and a physical examination is made. In this manner, not infrequently, some pertinent additional information is obtained, such as, use of tobacco in carcinoma of mouth, history of trauma, exact size of the lesion. In indicated cases special laboratory work is requested and in many instances photographs of the lesion are desired. These new findings, therapeutic suggestions and indications for irradiation are incorporated with the case history.

Each case record is cross-indexed alphabetically and according to the disease and organ involved. This filing system facilitates the use of these records for various purposes.

If the patient is to be treated with irradiation, a detailed description is written including the area or areas to be treated, filtration, the size of the portal, the target skin distance, the unit daily dose, frequency of treatment and the total quantity of irradiation. Treatments are recorded in duplicate by the technicians under the following headings:

TREATMENT SHEET

Date	Area	Size of Portal	Voltage	T.S.D. Distance	Filtration	Milliamperes	R Units	Time	Total R Units

One of these treatment sheets becomes part of the clinical record of the patient and the duplicate is filed in the radiation therapy department.

Radium treatment sheets are filled out similarly indicating the amount of radium or radon*, the type of applicator, filtration, distance, time and total dosage. A rough diagram of the treated part is made on the same sheet.

Personnel

The personnel of this department consists of the following:

Radiation Therapeutist
Resident Radiation Therapeutist
Two Technicians
One Graduate Nurse
One Medical Social Worker
One Stenographer—clerk
One Orderly

The Radiation Therapeutist is the medical and administrative head of the department. He is well-versed in the clinical as well as the therapeutic aspects of the diseases that come to such a department. He examines each patient prior to the initial treatment and notes the progress made under irradiation. Whenever radium is the method of choice, its application is carried out by the radiation therapeutist alone or with the cooperation of the specialist referring the patient for treatment. When surgical approach is needed in the application of radium, for tumor of the bladder, esophagus, etc., the radiation therapeutist works in conjunction with the surgeon in that field.

*In this department radon is chiefly used.

The Authors

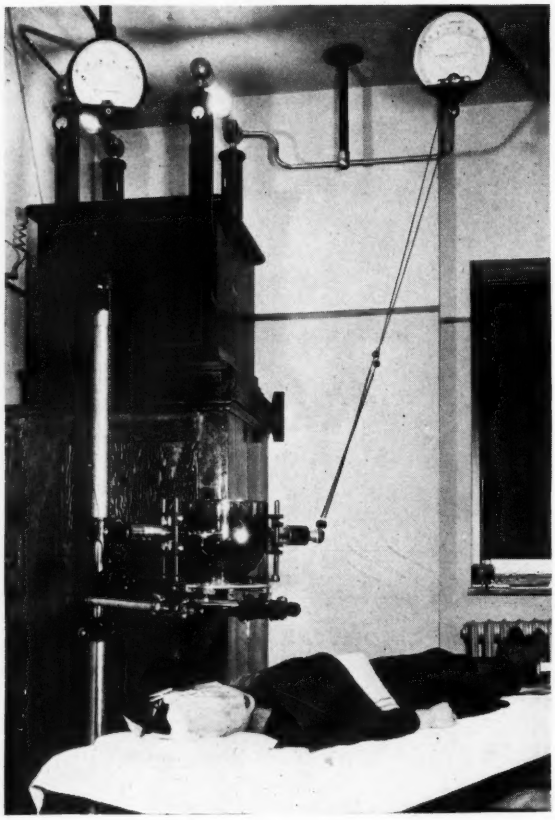
● Dr. Marcus D. Kogel is Medical Superintendent and Dr. Leonard B. Goldman is Radiation Therapeutist of Queens General Hospital, New York City.

In addition to the radiation therapist, who is a full time paid employee of the hospital, there are two associate visiting radiation therapeutists who assist him in the conduct of the department.

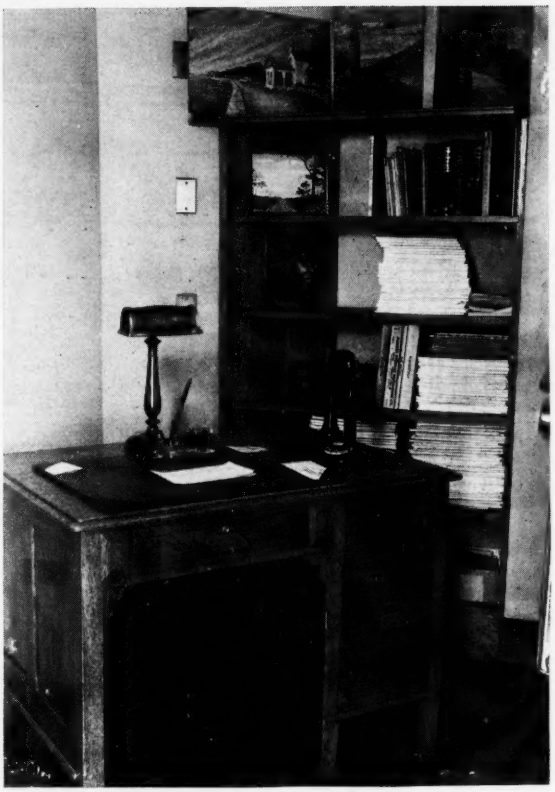
The Resident Radiation Therapist must have completed at least a two year general internship. His duties are to examine all patients with special attention to the part or parts involved. He is required to make a cursory examination before each treatment, and see that the therapy is directed properly. When radium is used, he is responsible for recording properly all factors utilized in the treatment. He makes daily ward rounds seeing all patients receiving irradiation, and visits radium cases at least twice daily noting his findings and general suggestions on the chart.

The Technicians are graduate nurses trained as technical assistants in radiation therapy. They prepare the patients for treatment, operate the x-ray unit, record each treatment and assign subsequent appointments for treatment. The technicians are responsible to the radiation therapeutist for the proper care and safekeeping of the radium and its appliances.

A Graduate Nurse, preferably one with previous experience in a cancer division, is essential to a well-rounded radiation therapy department.



Superficial Therapy Room



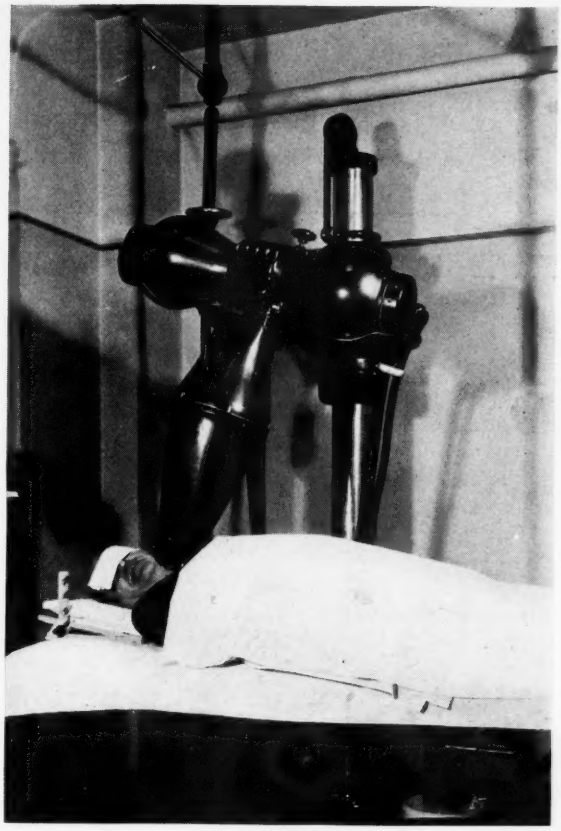
Office of the Radiation Therapeutist

Her duties are to assist in all examinations, dressings, biopsies and operative procedures incidental to radium application. She makes requisitions for the necessary drugs, instruments, stationery and linens used by the department.

The Medical Social Worker is a graduate nurse who has completed special work in this field. Her major efforts are expended in helping cancer patients in their adjustment to the many difficulties of their situation. After the patient is discharged from the in-patient division she makes the required home visits for follow-up purposes. If the condition demands custodial care, the social worker makes necessary arrangements.

The Stenographer-Clerk besides the general duties assigned to her, has special duties in the radiation therapy department, such as making clinical records available, recording appointments, indexing each case and maintaining statistical records. In addition, she sends out follow-up notices to patients whenever necessary and attends to the correspondence with private physicians and institutions, requesting and giving information.

The Orderly transports patients from and to the wards and assists in the preparation of male patients for treatment. He acts as a messenger



Deep Therapy Room

and renders assistance to the technicians whenever his services are required.

Administrative

An important adjunct to efficiency is a well-conducted appointment plan. Unnecessary waiting or crowding should be avoided at all times. We keep an appointment record for both in-patient and out-patient cases. The book contains several hundred pages so that a follow-up may be made as far as six months in advance. The following illustrates a typical page:

DATE

In-Patient Cases

Name
Name
Name

Out-Patient Cases

Hour	*Low Voltage*	*High Voltage*	*Follow-up*
10:00 a. m.	Name	Name	Name
10:15 a. m.	Name	Name	Name
10:30 a. m.	Name	Name	Name

Ward patients are usually the weakest, therefore, it is advisable to treat them first in the morning after they have had a night's rest and are at that time best able to stand transportation and treatment. After treatment in the morning they are free to be with their relatives and friends during visiting hours in the afternoon.

In order to make it possible for out-patients to keep their appointments, a motor corps has been organized by public spirited charitable women, who transport patients to and from the hospital in their private cars. In 1939, the motor corps made a total of 2779 trips without incident. This agency is of tremendous importance in helping to maintain the treatment of ambulatory but weak patients.

It has been found practical to set aside a special day for the treatment of patients requiring radium. Patients requiring an application of radium for more than three hours are kept in the hospital.

A clinic patient is given a folded blue appointment card on which are printed pertinent directions:

1 Do not scratch or irritate by wearing apparel, nor apply any substance to the parts treated without orders from the doctor treating you.
2 Avoid constipation; bowels and bladder should be emptied before treatment.
3 Drink a glass of lemonade and rest after treatment, if possible.
4 Take no medicine without permission of the doctor treating you.
5 Avoid sunburn to treated area.
6 Do not disturb dressings after adjustment by doctor.
7 Report at once to this department any changes in the skin or any symptoms appearing after treatment.

Department of Hospitals
Queens General Hospital
Radiation Therapy Service

APPOINTMENT CARD

Patient .....

Always be on time for appointment. If for any reason you cannot appear for treatment at the time specified

Phone..... Extension...
for another appointment.

APPLY FOR TREATMENT AT
RADIATION THERAPY DIVISION

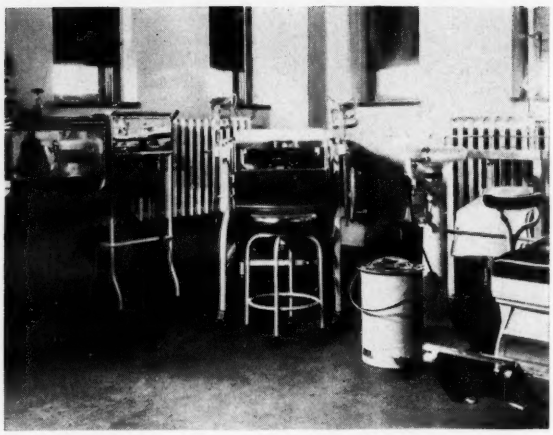
TIME	DATE	TIME	DATE

Patients who fail to keep their appointments are notified by mail stressing the seriousness of their condition and another appointment is arranged. If the patient does not respond, the social worker is sent out to ascertain why the patient has not returned to the clinic and re-emphasize the necessity for continued treatment. In the event the patient is receiving private care or is in another institution, correspondence is conducted to secure necessary follow-up data.

Physical Facilities

The physical plant for the care of our patients is extremely limited in space, yet it shows what can be accomplished even under difficulties. The office of the radiation therapeutist is a reclaimed closet with furniture made to order by our carpenter. This office is given a cheerful appearance by paintings donated by our grateful artistically inclined patients. There are three treatment rooms, each approximately 12 ft. by 12 ft. in size. Two of the rooms are used for deep therapy and have machines with a capacity of 200,000 volts. One room is used for low voltage therapy with a machine of 135,000 volts capacity.

An examining room, completely equipped for all types of examinations, is also utilized as a radium room. Radium is used in the form of radon and this is obtained in any quantity or form from the central distributing radon plant on Welfare Island—a unit of the Department of Hospitals.



Radiation Therapy Examining Room

The outline given here represents the organization of a department of radiation therapy associated with a general hospital having a capacity of 696 beds with an active out-patient department approximating 180,000 visits yearly. During the year 1939, a total of 8671 patients received 9971 irradiation treatments. There were 8075 deep x-ray treatments, 1675 superficial x-ray treatments, and 197 radium applications. Approximately 75 per cent of our cases seen were ambulatory and came through the out-patient department. An average year's work is represented in these statistical data. It is our opinion that every general hospital should have an irradiation therapy department.

Annual Census of Hospital Service in the United States

For more than twenty years the Council on Medical Education and Hospitals of the American Medical Association has taken an annual census of registered hospitals, and the American College of Surgeons has received statistical reports annually from hospitals meeting the minimum standards of the College and those under consideration for approval.

The American Medical Association and the American College of Surgeons have combined the reports which each has asked for in one simplified form, and this will serve the purposes of the reports to each of these two organizations. The compiled returns will be carefully analyzed and will serve as a basis for the "Hospital Number" of the *Journal of the American Medical Association*. This published analysis places the essential information relative to the hospitals at the disposal of all hospitals, physicians, and others who may be interested. The single questionnaire which is being sent out will make unnecessary many of the questionnaires which our hospitals have been asked to accomplish in the past.

The hospitals having received the questionnaires, which are printed in triplicate, have been unusually prompt in accomplishing the questionnaire and returning it. More than fifty per cent returned the questionnaire within ten days after mailing.

Hospitals would do well to cooperate in filling out the questionnaire and returning it promptly. Compilations of the report will cover the calendar year of 1940.

Organization and Administration of Hospital Dietetics Department

MARY M. HARRINGTON, B.S., M.A.

A HOSPITAL dietary department has three responsibilities — administrative, therapeutic, and educational. All of these functions of the department must be coordinated smoothly with all other groups to function for the good of the hospital and the patient. This unit of the hospital organization must conform to the highest standard of not only the business world, but to that of all the professional groups concerned.

The Author

● Mary M. Harrington is the Director of Dietetics, Harper Hospital, Detroit, Michigan.

Administrative and Financial Responsibilities

Every institution must be so organized that all its units function in the cause for which it was created—the hospital functions for the patient—but all units should follow the principles of good business which requires sound financial basis. The dietary department is responsible for the expenditure of a large portion of the hospital dollar, and such expenditure should be very carefully controlled and analyzed. Carefully planned menus with a well-maintained standard of quantity prepared and quantity served is necessary to regulate cost.

Food costs are important, but must not receive emphasis out of proportion to all other responsibilities. The head of every dietary department is responsible for the services of a large personnel whose duties must be so planned that the palatable meals will be served in an attractive manner. Constant checking and supervision with an alertness to criticism must be maintained to promote adjustment to the consumer, be he patient or a member of the personnel. This employer owes each member of her staff and personnel a sense of security, appreciation, constructive criticism, and a sense of worth-whileness, and must ever be conscious that "we all work."

Therapeutic Responsibility

A good state of nutrition is the dietitian's responsibility to the patient and applies to the house diet equally as much as to special diets. Food eaten is as important to her as food served. All diet prescriptions are filled by this department and the same care and accuracy applies here as in the carrying out of the physician's orders in the other units. The same code of ethics which governs the allied professions governs her attitude to the patient. Intellectual honesty and cooperation are necessary to work to the best interest of the patient.

Educational Responsibility

The hospital outlines its educational responsibility to the following groups: the patient; the nurse, dietitian, intern, and all interested allied groups; the community; the advancement of medical science. The dietitian is an agent of the institution in carrying out part of this educational program.

The Patient

Normal nutrition is the objective of every dietitian but such a goal can only be reached by teaching the patient to eat the proper food according to his prescribed diet, with every consideration as to his social, economic, and religious influences. During this period of stress the dietitian should not only teach the diet, but should do her utmost to teach the best food selection for every cent spent in the household. It is the sum total of patients which are an influence in a community.

The Nurse

The nurse is a public health agent regardless of the type of nursing which she elects to follow. She has a responsibility in teaching the public how to apply the principles of the modern science of nutrition in every day meals eaten or served

to others. Instruction in this work should not be a secondary consideration, but should be a well-organized, carefully prepared course under a competent instructor.

The Dietitian

Well-directed experience must be offered to future dietitians, if the efficiency of this profession is to be improved. The hospital reaps the value of this training by being able to secure the services of young women who have had the proper training to fit them to take charge of a dietary department. The American Dietetic Association demands a very high type of training and experience for its members, and it is to the advantage of the hospital to select the members of this department according to the highest standards just as is done by any sound business organization. Many young women hold this title and position, but are not eligible for membership in the profession. If these people succeed, it is because of unusual ability rather than training, but if they fail, the profession is often condemned.

The Physician

We are only educated in one field, but we must understand the problems of all fields with which we come in contact. The physician prescribes a diet in relation to body processes, and the dietitian interprets this diet in terms of the patient's food habits, and pocketbook. The physician is keenly interested in having the diet followed by the patient but is not in a position to fit this diet into the food allowances. Sometimes a patient knows what not to eat but is at a loss to know what should constitute his daily meals when these foods are omitted. Occasionally these diets overshadow all responsibility to the physician, and steak, chop, etc. are more important to the patient than the cost of medical care. Expensive, complicated diets do not mean a better state of nutrition, and the patient when referred to the dietitian for instruction, can be taught which foods can be substituted with the same value and at a minimum cost. The dietary department has a service to the physician in teaching the diet to the patient, and this can become a very valuable contribution since this teaching should be given not only from the viewpoint of the home, but may consider purchasing and preparation. Another service to the physician is assistance in study which will contribute to the advancement of medical science. This may consist only in keeping the diet as an accurate and constant factor, or a specific piece of work. The dietitian because of her strong science training should be capable of making an intelligent contribution to the problem if she is a student in her own field and understands the allied field of investigation.

Attaining Objectives in the Dietary Department

These objectives can only be attained by first selecting the dietitian with the training and experience which prepares her for the position, and then giving her the support and equipment to develop the department according to the policies of the institution. A static department may be due either to a dietitian who fails to keep in touch with her profession and its advancements, or to an administration which fears knowledge rather than treasures it. Constructive criticism, careful guidance, and confidence are as necessary to the dietitian as to any other employee and will do much to stimulate her best efforts.

Status of the Department in the Institution

The dietetics department spends a large portion of the hospital dollar and ranks second in the amount of money spent by the administration and in responsibilities. These facts establish it as a major unit of the administrative group and its status in the institution should be recognized as such. Dr. Malcolm T. MacEachern recommends that this department should be placed on the same administrative level as nursing, medicine, and business management. The dietitian should be given the same recognition and consideration as the heads of the other departments.

Food is essential in the treatment of the patient and plays an important part in influencing the morale of employees. Good food service is an asset to the institution and a reputation for poor food service can be easily acquired in the community and be detrimental to the hospital. Good food service is dependent not only upon the quality of food prepared and served but also in knowing the reactions of the consumer. Every dietitian is trained in the preparation and service of good food and is serious in the acceptance of her responsibilities. She must know the habits of her clientele and her judgment should be accepted.

Eating plays a very important part in the social life of many individuals who consider themselves qualified to act as judges and their comments are usually on the basis of their personal food likes and dislikes. Physicians and nurses often feel a responsibility to comment unfavorably on the appearance and quality of the completed tray before the patient. The dietitian will welcome constructive criticism but knows the psychological effect of such comments on the patients. Build a good food service and give it proper recognition and support and the status of the department in the institution

will become a vital part of the professional care of the patient psychologically as well as for its therapeutic value. If the hospital personnel feels that a definite effort and interest centers around their food, a finer esprit de corps will exist.

Selection of the Dietitian

The selection of the dietitian should be carefully made on the basis of training, experience, personality and adaptability for the particular type of hospital. The responsibilities expected from her should be defined and her position in the organization and relationship to other departments clearly outlined. A continuous turn-over of people in this position warns the hospital that its understanding of the position may not be satisfactory to the standards of the dietetics profession.

Selection of a dietitian through her own professional organization assures the hospital of a person meeting all the standards of her profession. Small hospitals often feel they can not afford the salary involved but a capable dietitian can not only save this amount of money for the institution but can provide an efficient, economical food service. A recent survey showed the ratio of dietitians in institutions of various sizes as follows:

Hospitals up to 75 beds	50 beds per dietitian
75-125 beds	86 beds per dietitian
125-300 beds	78 beds per dietitian
300-500 beds	134 beds per dietitian
500 beds and over	244 beds per dietitian

The type of service offered by the hospital would affect the number of dietitians employed. Large hospitals offering ward service mainly would have fewer than hospitals of the same size with a high percentage of private patients.

Salaries of dietitians have not been proportionate with the education and training involved. The amount paid varies with the section of the country but the usual beginning salary for a student upon completion of her training is $75 and full maintenance or $120 without maintenance.

The dietitian should not be expected to work longer hours than other staff of the hospital. A forty-eight hour week has been found to be very satisfactory, thus allowing the dietitian a full day off each week, with alternating Sundays and holidays. The working hours depend upon the type of position but the majority of dietitians find it necessary to work split hours in order to be able to supervise the preparation of three meals. Some provision for future advancement in salary should be made to increase stability.

The Physical Plant for the Department

The physical plant for the dietetics department is often neglected and other units of the hospital which are more public receive renovation at the expense of this important part. Expensive, elaborate equipment is unnecessary but there are many modern labor saving devices which increase the efficiency and economy of this department. Housekeeping duties and repairs may be more expensive than a simple renovation and remodeling of the kitchen area. Labor saving devices increase the efficient production without additional employees and with greater contentment among the personnel. Planning a kitchen that will save footsteps of the employees in the working area and diminish transportation of supplies and prepared food can be accomplished after much study of the present plan and its weaknesses. Such planning must be made by the architect in consultation with the dietitian who knows the production which must take place in a limited time. Many floor plans are attractive architecturally but very impractical for the particular institution. An efficient kitchen must be planned in relation to the hospital as a whole and the distribution of food to the various units.

The physical plant which is planned for centralized preparation and service is most desirable. The majority of the larger hospitals have modifications of a true central service. Preparation of food can be performed in one place but the service of food may be distributed through various unit kitchens. There are hospitals which have various kitchens in which food is prepared for private patients, nurses, interns and guests. Operation of so many preparation units can often be eliminated with equal satisfaction and food standards and marked reduction in effort and cost. A simple example is a salad room close to the source of supply of raw food where uniformity of production, standardized portions and all supplies for this preparation are concentrated. A smaller number of trained personnel are needed and all leftovers and waste can be more closely supervised and used. The problem of transportation is no greater than that of distributing the materials to each unit kitchen for preparation.

Organization of the Department

The type of organization within this department is influenced to a large extent by the general organization of the hospital. The hospital administrator should give the dietitian a clear picture of the general organization of the hospital and the present organization of her department. Conferences and guidance will enable her to guide her planning in accordance with the policies of the

hospital and promote a smoother functioning within her department.

There are three types of departmental organization—the line, the staff, and the combination of the line and staff type. The line type of organization makes a sharp demarcation in as small a department as this one and removes some of the personnel too far from the head of the division. The staff organization gives authority to the assistants on a functional basis and demands no responsibility outside their special fields. This type of organization does not provide sharp enough lines of authority for good administration. A combination of the line and staff plan is particularly fitted to the dietetics department where it is possible for personal intimacy to exist and permits administrative problems to be solved by the person especially qualified to judge them and therapeutic decision should be made by the dietitian who is entirely familiar with the problems involved. All staff dietitians are on a par as heads of their divisions and each has an important contribution to make to staff policies and an obligation in teaching and contributing to the advancement of the department and the profession.

An experienced and successful hospital administrator says that every order and policy should cross his desk each day. This requirement should be made of the new dietitian until she is thoroughly familiar with general policies and procedures which should be centralized but unnecessary details are time consuming and delay action, permitting insufficient time for the broader supervision and analysis of the department. This department head should be in close touch with the various hospital groups and should be able to observe the working policies of the institution as a whole and not be overwhelmed by unnecessary details in her department. Every opportunity should be made to know the reactions toward her department, and such reactions should be carefully evaluated to improve working routines.

The centralized type of organization permits direct control of food to the consumer, eliminates duplication of effort and waste, and permits more careful control. However, it is important that all of the staff of the department have a clear picture of organization to prevent misunderstandings and to have a clear delineation of policies. Such a type of organization is expressed in centralization of all of the various duties as much as possible and provide channels for the direction and solution of new problems.

Equipment

In a recent study made by the American Dietetic Association in thirty remodeled or newly built kitchens, some interesting information has been obtained regarding kitchen equipment floor space. Hospitals contemplating changes in this unit might secure this report from the Association office for detailed study. In some hospitals, essential articles of equipment were lacking and in others, it seemed as if some of the equipment was excessive in amount and size.

In the selection of kitchen equipment certain fundamental factors should be known and they are as follows:

Durability

Efficiency determined after actual observation in other institutions

Service and maintenance provided by the company

Ease of operation and cleaning

Extent it will increase production and reduce effort

Equipment should be purchased only after a close study by the dietitian and a conference with the employees who will be using the machine as their experience is often very valuable in helping to decide upon a particular make. Continual improvement is being made in the construction of equipment and each article should be carefully investigated before installation.

Personnel Selection and Management

The selection and management of personnel is a serious responsibility. Employees should be hired on the basis of their skill, personality, and adaptability for the job. However, each employee should be carefully trained on that work and not left to his own resources to succeed or fail if an efficient department is to be maintained. Each employee should be given a written outline of his duties and sufficient supervision to help him learn to perform them satisfactorily. Continual changing of employees costs the hospital money and the careful selection and training is saving dollars. Definite working hours and time off should be maintained and the plan of giving each employee a full day off each week is much more satisfactory than giving two afternoons, both from the satisfaction of the particular employee and the department. The idea of a planned wage scale and promotion to more interesting jobs is a desirable incentive even if the wages can not be increased. We are all employees and every worker desires a feeling of security and appreciation and the lowest employee contributes as much to the successful operation of the institution as the one with more training and opportunities.

(Part II of this article will be published in the February issue.)

Influence of Prenatal and Infant Care on Child Development

I. NEWTON KUGELMASS, M.D.

THERE are time and conditions that are particularly suitable for the conception of choice progeny. Favorable fertilization depends upon mutuality of affection expressed wholesomely. The degree of emotional devotion of one parent to another is reflected dominantly in the more vital elements of the progeny. Very young parents tend to produce plain citizens; the very old tend to propagate genius. The greater the disparity in age and constitution, the more unusual the characteristics of the child-to-be. Young mothers produce boys more frequently than girls especially at the first birth; the older the mother the less the tendency to give birth to boys. The more female the father's body build the more likely the conception of a girl. Parents of different nationalities tend to produce more girls than boys in comparison with those of the same nationality. Prenatal fatigue is conducive to the conception of debilitated or mentally deficient offspring. Once pregnancy is suspected, early confirmation by the Ascheim-Zondek test is essential as a basis for superior prenatal supervision. This is most helpful during the first three months when the physique of the child takes real form. Thereafter prenatal care is more beneficial to the expectant mother.

Influence of Prenatal Care

The new being-to-be has the smallest of beginnings. A tiny cell embodies the heritage of the past for children come through parents rather than from them! The first cell grows rapidly once it is implanted in the mother's womb. Then it divides and sub-divides continuously until three distinct layers of cells are formed and these develop into various parts of the body. The growing organism passes through critical periods of development at which it is particularly susceptible to structural deformity. Any disturbance in the mother's well-being may alter the intrauterine conditions and change the course of the baby's development. Early interference with embryonic development produces gross structural defects while late interference merely results in weakened conditions of one or more organs of his body.

The greatest disturbances of a lifetime may befall the child long before it is born but much can be done prenatally to prevent irreparable damage. Even birth shocks the newborn for it suddenly deprives him of the ideal medium for life. Birth is life's greatest hazard for two-thirds of newborn deaths result from difficult deliveries. Girls survive the ordeal much better than boys because they are one month ahead in development. The battle of the sexes is already in evidence at birth—and even then is, in favor of the girls.

Early Functional and Structural Examination of Newborn Important

The newborn is unitary and unique. Never before did such identical conditions exist for the evolution of a human being nor can they ever be exactly reproduced again. The mother possesses 17,000 germ cells in all while the father proudly produces 339 billion. The chance that any particular pair will get together is one in five million billion. Each baby has a different hereditary composition never exactly like any other in the world. Therefore the newborn needs expert scrutiny to determine his functional fitness. Many structual deviations are correctable early before plastic tissue becomes fixed. The child's fulfillment of his personality is ultimately limited by the weakest characteristics of the body. It conforms to the maxim "the chain is as strong as its weakest link" hence the need for early adjustment of all deviations. Despite the contributions of scientific medicine, we are limited in the possi-

The Author

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Presented before a Community Hospital Drive in Hartford, Connecticut.

bilities for perfection of personality. At birth thirty generations of cells have accumulated while the rest of man's life yields but five additional generations of cells. In other words, 80 per cent of the being is completed at birth and a lifetime is devoted to the perfection of the remaining 20 per cent. Obviously a child has already seen his best days before birth.

Life begins with perfect integration. From conception to birth all tissues grow at the same rate. There is a perfect internal equilibrium within the child undisturbed by a constant external environment of the mother. But soon after birth, development diverges in different tempos—the physical at one level, the mental at another, the emotional at a third and the social at a fourth rate of growth. Each proceeds independently, vying with one another, even though initiated within the child himself. He is thus a composite of a physical age, a mental age, an emotional age and social age, respectively. That is why he may be erratic, impulsive, selfish and unstable. And the greater the differences in these developmental elements, the more unhappy the child. Conversely, the better these levels are harmonized into function, the more adjusted the personality.

While progressive integration proceeds automatically throughout childhood few adults emerge with an integrated personality. It is the goal of modern pediatrics to perfect each of these aspects of child development before maturity and thus minimize the number of discordant beings so prevalent among us. It takes a third of a lifetime to mould a child into a decisive adult. At twenty he is a master, at thirty he is a critic, at forty he is a judge and at fifty he is a bundle of habits. Each decade of life has its own characteristics but actually there are two opposing forces operative throughout life—a constructive, attaining its maximum at maturity; and a destructive, with a maximum at senility.

Physical Course of Growth

The physical course of growth is continuous but rhythmic. The span includes three cycles—rapid growth in infancy followed by slow growth in the pre-school period; rapid growth during the period of second dentition followed by slower growth during childhood; and finally rapid growth during puberty followed by slower growth during adolescence. Each springing-up period is followed by a filling-out period; the one is physical, the other mental; the one is motor, the other emotional; the one is stimulating, the other fatiguing; the one is actually growth and the other mere differentiation. But each period of growth differs in content in each cycle.

In infancy, a pound of weight represents brain and viscera; in childhood, bone and muscle; and at maturity just fat and water. An evaluation of the physical status and functional efficiency of the child offers a basis for improving his calibre. These very means of preventing illness and perfecting growth have increased life expectancy from 33 years at the beginning of this century to 61—all accomplished by storing stamina during childhood.

Mental Growth

Mental growth follows a different course than the physical. It proceeds in one cycle throughout childhood and depends upon sensory functions for sources of knowledge, upon motor functions for efficient behaviour and upon thought mechanisms for expressions of personality. The mental energy expended is a product of two factors—ingenuity, which is inherited by some; and knowledge, which is acquired by all. The former is obvious at birth and remains relatively constant throughout life while the latter accumulates if the child is given freedom of opportunity to explore. The healthy-minded child adjusts his personality to the requirements of his environment for the mutual benefit of both but the slow-minded has his difficulties. Early evidences of maladjustment point to mental disturbances that can be corrected. The majority of children have latest qualities of superiority in some field, hence early recognition of special aptitudes make the direction of his talents more fruitful. The mind is like a Nerst lamp for the more current that goes through it the brighter it glows. It is unfortunate that modern systems of education are veering from scholasticism. The old Spanish proverb still maintains—"pleasure of the senses are temporary, pleasures of the heart lead to sorrow, but pleasures of the mind to eternal bliss."

Emotional Growth

Emotional growth is most dominant in behaviour. It represents one of the greatest forces for life if properly harnessed. The excitation originates in the central nervous system and spreads to all parts of the body. The accompanying psychological sensation represents the emotional experience. Five fundamental instincts stimulate emotion—activity, hunger, sexuality, reflection and creativeness. They are ega drives for maintenance, guardians of life. If each of these is satisfied, emotion rarely arises but such ideal states never exist for anyone. And so the child becomes an emotional dynamo. The force with which his emotions are released depends upon his glandular pattern. Since the essence of emotion is in its spontaneity, it cannot be edu-

cated. It may be influenced by self-discipline but not suppressed. The child's psychic power must be modulated early to give way to the respected will of the group.

Responsibility of Growing Superior Children

Growing superior children becomes the responsibility of parents, physicians, and the community. But each approaches the problem differently—parents are bewildered about what to do, physicians are determined about what should be done, and the community is unprepared to meet the challenge. We can neither change the parents nor the physicians but we can maintain a superior hospital to bring about the cooperative effort of all concerned. The word hospital means host but the kind of hospitality has changed with the ages.

In Babylonian times the sick were brought to the market-place so that they could confer with passers-by regarding their complaints. Those similarly affected in the past advised treatment. It was considered an ill omen to pass the sick person in silence. Free advice was part of the hospitality in the market-place. You have all experienced some of this Babylonian practice. Those who knew and those who didn't prescribed for you with equal authority. You know the outcome. In ancient Greek times hospitals were temples for the ailing to visit with priest-physicians. Spiritual forces were invoked to talk the sick out of their misery. In medieval times hospitals were crude abodes for offering Christian charity. The homeless, poor and sick were ministered to by pious folk. Everything was done for the needy but alleviate their disorders. In modern times the hospital is a city within a city, a constructive apostle of health. It is the fifth largest industry in this country. Every three seconds some person enters a hospital; every thirty seconds a baby is born in some hospital; every tenth person occupied a hospital bed sometime last year. The hospital service has become so complex that it takes a worker for each patient and several hundred skills to effect a cure at the cost of only a few cents an hour.

Hospital as a Community Health Center

The modern hospital now serves as a community health center. It is a social institution coordinating the services of specialists. They constitute your local army of health officers. The generals or medical specialists know more and more about less of you and the soldiers or general practitioners know less and less about more of you. But together they work for your redemption. Each use science and art as two blades of a pair of scissors to cut into your human fabric. Art or science alone constitute an imperfect instrument but together they enable the medical mind to master your problem. These students of mind and body must be provided with hospital armamenteria for efficient functioning. It is the means of conserving the only economic asset left in the world today, the health of the community. And we must start from conception to be of real service to the coming citizenry for little indeed can be accomplished with grownups.

The modern hospital now fulfills the needs of the individual in the prevention and treatment of physical, mental, emotional and social disorders. The emphasis is upon the individual because effective results can only be attained by treating the child as a whole rather than the disturbances within him. Every one of the hundreds of disorders possible, characterized as specific disease entities, never occurs in the same way in two individuals because of their differences in constitution. We must therefore treat the individual as a whole rather than his disease to achieve any degree of perfection.

This recent tendency towards individualization of diagnosis and treatment gives the voluntary hospital preeminence over the city institution. The one views the individual as a private patient while the other as a public charge. Indeed, some of these large medical centers have become monuments to organization and mausoleums to medicine. The differences between the two types of institutions will become more and more marked with time. But these differences in hospital function should imbue you with the personal value of your institution to you and your family. If a functional analysis of your hospital does not measure up to your expectations, now is the time to raise its calibre.

We are all coming to depend more and more on institutions and less and less on our home. In the past everything radiated about the home but today everything takes place everywhere but in the home. The glory of the home has gradually given way to the glorification of institutions.

The masses have too many insecurities of the wrong kind and the rich too few insecurities of the right kind. A changing world has given us new kinds of securities, all vested in institutions. We should rejoice that every man, woman and child regardless of race, color, creed or social status may now have the best care that medical science offers; the best hospitals, the best doctors, the best nurses and the best of all things essential for well-being. Let us be thankful for these and other blessings of our country and our community.

Educational Publications of the American Hospital Association

1940

DURING the month of December, four new Manuals were published by the American Hospital Association and distributed to its institutional members. These were: (1) "The Care of the Psychiatric Patient in General Hospitals" (Bulletin 207); (2) the "Manual on Specifications for the Purchase of Hospital Supplies and Equipment" (Bulletin 208); (3) the new "Manual on Obstetrical Practice in Hospitals" (Bulletin 209); and (4) the new "Hospital Accounting and Statistics" (Bulletin 210). Each of these bulletins contains the latest information, standards, and recommendations on these subjects and each represents a definite contribution to the field of hospital knowledge and practice.

"Manual of Specifications for the Purchase of Hospital Supplies and Equipment"

The "Manual of Specifications for the Purchase of Hospital Supplies and Equipment," compiled by the Committee on Simplification and Standardization of the Council on Hospital Planning and Plant Operation, represents the culmination of a tremendous amount of work and now fills a long-felt need in this field. The introductory pages of the Manual include articles on the selection, purchase, storage and distribution of supplies. The Manual presents complete specifications for 362 commodities in constant use by the hospital. The Supplemental Index contains references to the sponsorship, designation, source from which available, and price of over 700 commodities in less general use in hospitals.

"Manual on Obstetric Practice in Hospitals"

The "Manual on Obstetric Practice in Hospitals" was prepared for the Council on Professional Practice. It is a new and revised edition of the "Manual" first published by the Association in 1936. A brief review of the chapters of this Manual will indicate the scope of this work. It contains a list of minimum standards for obstetric departments in hospitals, which is followed by chapters on Accommodations, Isolation, Clinical Facilities, Administration, Supervision, Records, Consultation, Morbidity, Conferences, Training, Procedures, Care of the Newborn, The Small Hospital, and a series of addenda, including a Check List of Furnishings and Equipment for the Obstetrical Department, Recommendations on Obstetrical Routine, numerous Specimen Forms of Records, and a Classification of the Toxemias of Pregnancy.

"Hospital Accounting and Statistics"

The new volume on "Hospital Accounting and Statistics," prepared under the supervision of the Council on Administrative Practice, not only includes in its pages the complete old manual on "Hospital Accounting and Statistics" first published in the spring of 1935, but also a series of new chapters with numerous forms and charts designed specifically for application in the small hospital. New chapters include such subjects as "General Accounting Principles," "Bookkeeping Procedures for Small Hospitals," and "The Annual Report."

"The Care of the Psychiatric Patient in General Hospitals"

The Manual "The Care of the Psychiatric Patient in General Hospitals" represents the first attempt to summarize this most important subject with special reference to general hospitals. A review of its chapters will indicate the scope of this publication: Chapter one deals with the evolution and extent of the present problem. It asks and answers such questions as, What is psychiatry? Who is the psychiatric patient? How many are there? What is needed? Chapter two surveys the trend of psychiatric service in general hospitals, tracing the history of the movement. Chapter three reviews the advantages, objectives and objections involved. It refers to the advantages to the hospital, to the community, to the patients, to the medical profession, and to psychiatry.

Chapter four considers the various types of departmental organizations, and the problems involved in each. Chapter five examines the organizational requirements from the legal, physical, and professional points of view. Chapter six considers the methods of psychiatric study and outlines examination procedures. Chapter seven enumerates the management principles in psychiatric disorders commonly seen in the general hospital. Chapter eight is a summary, which is followed by a bibliography and a list of recommended reading.

With the issuance of these manuals the American Hospital Association has made an exceptional contribution to the hospital field from the standpoint of educational publications. During the year 1940, no less than ten educational and technical bulletins have been published and distributed to the institutional members of this organization.

Educational and Technical Bulletins Published in 1940

Bulletin 200: "A Proposed Form for a Hospital Lien Law" (Council on Government Relations)

Bulletin 201: "Substantive Provisions of a Hospital and Clinic Law for States or Provinces" (Council on Government Relations)

Bulletin 202: "Job Specifications for a Hospital Organization" (Council on Administrative Practice)

Bulletin 203: "Ultraviolet Rays as a Sterilization Agent in Hospitals" (Council on Hospital Planning and Plant Operation)

Bulletin 204: "Manual on Insurance for Hospitals" (Council on Administrative Practice)

Bulletin 205: "Manual for Field Representatives of the American Hospital Association" (Council on Association Development)

Bulletin 206: "Administrative Cost Analysis for Nursing Service and Nursing Education" (Council on Professional Practice)

Bulletin 207: "The Care of the Psychiatric Patient in General Hospitals" (Council on Professional Practice)

Bulletin 208: "Manual of Specifications for the Purchase of Hospital Supplies and Equipment" (Council on Hospital Planning and Plant Operation)

Bulletin 209: "Manual on Obstetric Practice in Hospitals" (Council on Professional Practice)

Bulletin 210: "Accounting and Statistics" (Council on Administrative Practice)

New England Hospital Assembly

The New England Hospital Assembly will hold its 1941 conference at the Hotel Statler in Boston, March 12-14.

On Wednesday the two main topics of discussion will be "The Many Problems of the Small Hospital," with special reference to accounting, the importance of records, and purchasing and inventory, and "An Adequate Program of Public Relations," with special reference to house organs, the hospital hostess, newspapers and the hospital, and the trustee interprets the hospital.

On Thursday the main topic in the morning will be "Preparedness," with special reference to the place of the hospital in national defense, the voluntary hospital, the governmental hospital, local hospitals in the control of genito-infectious disease, and the place of the smaller community and its hospital in the preparedness program. In the afternoon the main topic will be "Continuing Education for Hospital Personnel," with reference to physicians and surgeons, nurses, dietitian and the hospital administrator. The Trustee Session will be held on Thursday evening.

On Friday the main topic will be "Rehabilitation of the Patient," with reference to medical social service, the itinerant social worker, and occupational therapy for small hospitals. The afternoon will be given over to a round table conference.

The annual dinner of the New England Hospital Assembly will be held on Friday evening.

Minnesota's Fifth Annual Institute for Hospital Administrators

The University of Minnesota, in cooperation with the Minnesota Hospital Association and the American College of Hospital Administrators, announces its Fifth Annual Institute for Hospital Administrators which will be held January 27 to February 1, 1941, at Center for Continuation Study, University of Minnesota, Minneapolis.

Reprints of Edward L. Bernays' Article

Due to an unusual demand for reprints of Edward L. Bernays' article, "Public Relations for American Hospitals," published in the December issue of *HOSPITALS*, an interested member of the Association has made available a number of reprints. These reprints can be obtained by writing the office of the Association, 18 East Division Street, Chicago.

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EDITORIALS

1940-1941

As the old year passes, hospitals have received many blessings for which they are duly grateful. The year just closing has been a year of growth, prosperity, and accomplishment. More patients have been cared for and in a better way. Friends of our hospitals have been more generous in their support, and more people have given to maintain their charities than in previous years. More than ever before our hospitals have enjoyed the confidence, trust, and patronage of our people. In a world awry, hospitals have been a beacon of unselfish devotion to humanity, a refuge for those who are afflicted, and a haven for those who are serving the ill and injured. Their farewell to 1940 is reluctant, but it is brimful of appreciation for all the good that the year has brought.

As the new year greets us, it brings a renewed consecration to our hospitals, an abiding faith in their future. It brings an assurance of the continuity and an extension of service to rich and poor, of every race and creed. It brings added responsibilities to our institutions, but increased opportunities to measure up in every way to the growing obligations to our communities. But above all and over all it brings the promise of security, of continuance of service to the sick, uninterrupted and unimpaired. It brings the fulfillment of our dreams for the future of our hospitals and a better appreciation of the part we have played in making that future secure.

Time, as reckoned by months and years, has no limit; it is circumscribed by no fixed boundaries; it runs on eternally. Our hospitals mark Time's progress with new and better ways of restoring the sick to health, saving lives of those who have been injured and of those who in earlier years would have been condemned to death by relentless disease. They shorten the duration of illness, bring health and happiness to countless homes. Those who serve the afflicted in their wards, comfort, counsel and guide them back to health, teach the rest of the world the lessons of tolerance, compassion for the unfortunate, and love for their fellowmen.

All these great blessings the new year brings to our hospitals, and to those who minister to their patients. Hospitals and churches and our public schools are civilization's most enduring monuments in this troubled world.

Our 1941 Convention

The Board of Trustees announces that the 1941 Convention of the American Hospital Association will be held in Atlantic City, September 15 to 19 inclusive.

The Convention in 1941 will reach a new peak from the standpoint of attendance and interest. The increased activities of the Association have been reflected in the growth of both the institutional and personal memberships. The importance of the role of our hospitals in the preparedness program, their enlarged activities in the event of declaration of war, the maintenance of adequate personnel to meet the increasing demands for hospital care, and the thousand and one other important problems affecting hospitals and their services, will bring into conference in Atlantic City representatives of hospitals from every section of the country.

Administrators, trustees, members of the medical and nursing staffs, the ladies' auxiliary boards and hospital personnel representing every department in a hospital will bring their knowledge, experience, and special skills to the Atlantic City Convention to help coordinate hospital activities in the discharge of every responsibility placed upon our system of hospitalization either by the Government or our communities.

The technical and educational exhibits will be complete in detail, and the hospital field will have the opportunity to examine at first showing the new equipment created in response to changing ability and civil conditions, and new plans and proven programs for hospitals during the present or any future emergency.

Thoughts at the New Year

The New Year is a season at which some of us are accustomed to consider past accomplishments and failures, take stock of our resources, and strengthen our purposes to be more efficient in the months that lie ahead. We are told that one cannot increase one's stature by giving thought to it, but this limitation applies chiefly to physical growth. Fortunately there are few hospital executives so self-satisfied or so proficient that they believe their respective institutions are taking full advantage of all possible opportunities to serve the communities that support them. Nor are there many, if any, who feel sure that they personally have reached that stage of development beyond which there can be no improvement or progress.

Much of the success of a hospital administrator depends on his ability to cooperate effectively with other people. If his hospital functions efficiently, it is largely because the medical staff and the administration work together harmoniously. If it enjoys a large measure of community good will, that is because the administrator has actively sought to make its service worthy of public approval and esteem. If the personnel is happy and is loyal to the policies and purposes of the hospital, that fortunate state of internal affairs did not come about just by chance.

Much of the time of a hospital executive must, of necessity, be given to the direction and management of routine procedures essential to providing satisfactory service to patients. But if it takes all of his time and thought to make his institution a good hospital, he can do little to make it a better one. It is possible that some hospital superintendents have not learned to delegate responsibility and authority to competent assistants, and consequently must busy themselves with petty details to the exclusion of more productive planning. There may be those who have not yet observed that the most successful administrators are coordinators rather than dictators. Some may not have acquired the ability to recognize opportunities until they see them receding. Some perhaps may need to regain the faith and idealism that characterized their endeavor in earlier years.

It may be that the new year is a good time to think on these things.

J. E. R.

The Importance of Personal Interviews

There is a certain rule of procedure for a hospital administrator or, for that matter, any executive officer who is in charge of other officers and employees and perhaps in contact with the general public. That rule is that whenever an order is given or especially if reproof is to be administered, a request denied, or disagreeable information conveyed, it should, if possible, be by personal interview between the hospital administrator and the person or group concerned. The order or message may be confirmed in writing.

The worst way for an administrator to send an important message affecting a member of his personnel is by word of mouth through a third person. The message will probably be muddled in the transmission, will not convey one's thought correctly and, if it is a reproof, will antagonize the recipient because another person has been brought into the matter to witness his discomfiture.

It is also a poor policy to send the message by letter, especially one written in anger. The recipient can neither see the administrator's face nor hear his voice. He has no opportunity to explain, and there are usually two sides to a question. If the director is very angry, let him write the letter and leave it on his desk until the next morning. Let him then read it, tear it up and request an interview with the person in question. This is an excellent method of working off steam.

It enables one to get a good sleep and to approach the problem in a judicial spirit.

The telephone is a very poor substitute for a personal interview. The participants in a telephone conversation can hear the modulations of the spoken voice it is true, but they cannot see each other's face or the possible smile which may take some of the sting from the words.

True the director himself cannot in person see all the aggrieved friends of patients or patients themselves, nor can he always see members of the professional staff who have transgressed rules and regulations which were probably made by their own executive committee. Members of both these groups he should see himself, as far as possible. He should have assistants who can act tactfully when called upon.

With nurses and employees he should act through the department heads who in turn should act by personal interview. The nurse or employee should have right of appeal to the director. The latter will uphold the head of the department unless grave injustice has been done.

The director or his agent should be thoroughly prepared on his subject before the interview. He should give the other side a chance to be heard and listen patiently. He should never approach the interview when in anger.

F. A. W.

Interns and the Draft

As embodied in the Selective Service Law and enunciated by those in charge of its enforcement, the principle of liability of every man within the prescribed age limits to service in the military establishment is truly democratic and fundamentally just.

However, the theory that deferred exemption should not be granted to any special group is of very little importance as compared with the principle of public policy because, after all, the medical group subject to military service is a very small percentage of the total number subject to the draft. The members of the Medical Corps are needed not so much as soldiers but as physicians, and while a physician would need some additional preparation in the way of military training in order to qualify as a medical officer, medical training is far more important than military training. To interrupt medical training in order to accomplish military training is unwise and obviously contrary to public policy. The best interest, not only of the civil population but of the military establishment as well, would be best served by permitting, or even by compelling young physicians to complete their medical preparation before they are inducted into military service.

Since the internship is rated as a basic training, either for general practice or for an introduction to a specialty, deferment should certainly be granted without question until the completion of the period of internship, which varies from one to two years. Since only a relatively small percentage of those completing internships go on for special training in residencies, exemption of residents until they complete their specialized training would apply only to a limited number of those subject to the draft.

Deferment of those preparing to enter medical specialties is not to be considered as a special privilege, but rather as a means of preventing a shortage of a group whose services will be needed later by both the military organization and the civil population, and whose special skills cannot be acquired by short-cut methods.

C. G. P.

A Message to the Hospital Personnel

In a charming little booklet released by the Hospital Association of Greater New York, entitled "Courtesy," this gracious sentiment is found:

> "When you were employed by this hospital you were selected because you were considered a humane, polite, understanding person, one who would ever be mindful of the tradition of hospitals and kind to all who

enter our doors. No matter who you are, or what you do, if you work in a hospital you should have a "hospital attitude." This can all be summed up in one word, COURTESY."

There are many things with which you are quite familiar through your training and daily experience in the hospital but which the public does not understand. Therefore, do not assume that the public should understand routine procedures, hospital rules and regulations and how to find their way around the hospital without asking questions. When they ask for information give them the courtesy of a reply just as full and clear as you can make it and without any suggestion of superiority born of a greater knowledge.

The spoken word is only one means of expression; one's manner is quite as important. Remember that a kindly and gracious manner is not only the mark of a self-respecting man, but is to your words what oil is to machinery. It makes them move effectively to their purpose.

A. S. B.

Ordeal by Fire

On this continent we have been prone for years to speak of the courage and the devotion to duty of our hospital nurses, doctors, and others. We have been proud, and rightly so, of the many instances of self-sacrifice, of rescuing bed-ridden patients from the flames and of even more heroic deliberate exposure to virulent disease. Upon such instances we have built our fine traditions of service to the sick. But few of us here have any conception of the ordeals gone through by the staffs of hospitals in London, Birmingham, Coventry, Southampton and other British centers. They have given us a new conception of what is meant by devotion to duty. Some day the full story may be written by an inspired pen, but so far we have had but fleeting glimpses of this fearful drama.

It is bad enough, night after night, to work, hour after hour, repairing the shattered bodies of women and children, to grope along the tortured wards and, all too frequently, to pull the sheet all the way up, but it is infinitely worse to do so with all hell breaking loose outside the windows, with the building rocking and glass shattering, with power and light cut off and the air filled with the sound of rending timbers and the roar of collapsing brick. In London alone already some thirty hospitals have been struck. Many of London's hospitals are old; few are fire-resisting steel construction; the damage done there is much greater than we could expect here in our large center hospitals. Yet their staffs carry on with amazing nonchalance. Patients may be hurried to shelters, but the doctors, nurses and attendants must be ready to receive the new casualties. Emergency and operating rooms may be destroyed but the work must go on elsewhere. The building may be burning in a dozen places from incendiary bombs, but still the work must go on. It is but to be expected that a mounting list of nurses and doctors have paid the price.

Nor do we here really know much about fatigue. When one goes week after week with but broken snatches of sleep, one almost forgets what it would be like to have a night of real sleep. It was the poet Riley who spoke of being so tired that he could not lie flat enough, so tired that he wanted to stretch out until he dript off the edges of the bed like molasses. Our colleagues in Britain know that feeling. Not only have the hours been long, often twice or more around the clock, but there has been the endless moving of patients, up and down the stairs, in and out of shelters and operating rooms and, all too often, with elevators not working. In the morning the debris must be cleared away, wards again made habitable, if possible, shattered windows repaired, shocked patients quieted, power and essential services restored and damaged supplies made ready for the ensuing night's attack. Several times a whole hospital—patients, equipment, and personnel—has had to be moved to other quarters in the space of a few hours. It was fitting indeed that Malcolm MacDonald, the Minister of Health, should have stated that no feature of London's superb resistance to the present ordeal has surpassed the way in which the hospitals are performing their duty. Hospital traditions have attained to a new standard.

G. H. A.

Laundry Management and Linen Control

FRANCES C. LADD, F.A.C.H.A.

IN this discussion we have endeavored to incorporate the thoughts of several outstanding authorities on the subject of laundry and linen control.

We have also endeavored to keep a continuity of thought in mind to enable a laundry manager and those in charge of linen control to carry the important details of both in mind as we progress.

Psychology of Clean Linen

Many of us accept the fact that when we want clean linen an adequate supply is always available, this is as it should be; when there is a shortage or none at all a state of confusion and indignation exists.

This fact came to our attention recently, when a friend suddenly became ill while on a camping party in a rather isolated community. Not only was the patient very uncomfortable, but the lack of an adequate supply of linen contributed to the confusion and had a definite effect upon the patient's mental attitude.

Our hospitals have many obligations to the patients, and among the important ones is a generous supply of linen. This is not only important from the standpoint of cleanliness alone, but it also carries a definite responsibility toward maintaining the patient's morale, which contributes to his recovery.

The Purchase of Linen

One of the first and major problems confronting us always is the purchase of new linen. A large percentage of us who purchase linen admit to ourselves, unconsciously, that we are taking more or less of a chance in these purchases. This should not be necessary, if one is acquainted with some of the important facts associated with the construction of certain varieties of goods.

We must admit that if we purchase linen from a reliable concern of good standing, our investment is safer, for we have to depend upon the manufacturer's integrity to a large extent, even though we do know certain important facts connected with our purchases.

The Author

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We must realize that there are no bargains and we get only what we pay for, since no manufacturer is going to operate at a loss.

The average purchaser of linen we believe is inclined to pass judgment on an item merely from the standpoint of appearance and possibily the weight of the sample of goods shown. One is never quite sure how much the sample in question has been dressed or loaded and, generally, we know nothing about the finish put on it. Unless the goods have been examined by an expert under a microscope to determine how many threads there are per inch, one cannot be sure that one is getting full value.

This brings the thought that outside of a few of the important facts with which we are all familiar, we are still purchasing linen in a rather unintelligent manner. There should be available for hospital service, a clearing house or laboratory wherein a complete analysis could be made and advice given in connection with our purchases.

This is certainly important when we realize the size of the linen inventory which runs into thousands of dollars annually. In our hospital, we make an annual investment for the replacement of linen amounting to well beyond $5000, and some years this amount has run as high as $7000 or $8000. This problem then is one that should be given serious consideration.

Weight of Material

It is often true, that a light weight article is stronger and more durable than one that is heav-

ier and, by way of illustration, it is not always the heaviest overcoat that is the warmest.

What we are presenting here is the fact that when our linen is laundered a goodly part of the laundering cost is determined solely by the weight of the article being laundered. Even though the article may be light in weight it may have more threads per inch which means that it possibly has a greater tensile strength than a heavier article with fewer threads per inch.

Lower Cost of Laundering

We have been told the story about one of the larger hotels in the western part of the country whose laundering costs were determined to be excessive. An exhaustive study revealed the fact that proper equipment was in use in the laundry and proper supplies were being used, which were not in excess. However, the study showed that the hotel was using linen of excessive weight.

The amount of linen used per room was found to be satisfactory, but each individual sheet, spread, towel, etc., was far too heavy for its size. After consulting leading manufacturers of sheeting material, etc., this hotel selected a better grade of linen, lighter in weight but stronger throughout and more durable. As they entered into a replacement program for linen their laundry cost was ultimately reduced so that the extra investment in linen was more than absorbed.

Standardization of Linen

This brings us to the standardization of linen. Undoubtedly, the average hospital will have as many as fifty main classifications of linen with many of these having various sub-classifications.

Accordingly, with all of these articles under consideration, it is important to have us consider the standardization on sizes and grades of materials. This would aid cooperative buying between the manufacturers and the hospitals to the extent that the manufacturers could produce a quality piece of merchandise that could be sold at lower cost.

In fact, in 1927, there was a meeting called by the Division of Simplified Practice, Department of Commerce, Washington, D. C., to effect a standardization of hospital and institutional linen. Much has been done since that time, that has affected material economies both in the purchase and the use of linen. This has helped considerably in reducing the number of sizes of the various articles used in hospitals and institutions.

At that time there were approximately 50 sizes of bed sheets, 40 sizes of pillow cases, and 70 sizes of draw sheets. To give the authentic figures on the progress made along this line would be a difficult proposition but as almost all of us will recognize, and understand, the number of sizes today has been reduced considerably. This angle is still a problem and undoubtedly could be carried further in our own hospitals.

It means more efficient storage, a better possibility for interchangeability from one department to another, etc.

Grades of Linen

As far as the grades of linen are concerned either for private room or ward service, we are of the opinion that there is nothing to be gained by using cheaper grades for certain types of hospital accommodation.

Circulation

The efficiency of the hospital laundry and the degree of availability of linen depend on the amount of linen in circulation. Naturally the size and type of the hospital control these factors to some extent, by this we mean that a hospital catering to a larger number of obstetrical patients, surgical ward patients, and those admitted for diagnostic treatment, would naturally use much more linen and require a larger amount in circulation than the smaller type of hospital.

An obstetrical patient would use as much as forty-two pounds of linen per day, in the delivery room, and the average operating room patient as much as thirty pounds, whereas, a normal medical case runs as low as eight pounds per day during convalescent care. The amount of linen per day given on obstetrical cases, does not include laundry for babies in the nursery which sometimes amounts to as much as ten pounds per day, per baby.

Another type of case which tends to increase the amount of linen is that where the patient is admitted to the diagnostic clinic. Obviously, this patient has contact with the laboratory, the x-ray department and other diagnostic departments, depending upon the treatment necessary. This is an expensive type of admission, and increases the amount of linen used. This brings us to the point that in actuality, each and every department in the hospital requires its own definite amount of linen in circulation. The grand summation of this linen would determine the total amount that should be in circulation. In other words, consideration has to be given to the number of each item in actual use and the rate of change necessary.

Then too, we must know the time required for converting the soiled linen into clean linen. This

is one way of estimating the amount of linen which should be in circulation.

We must consider that the laundry does not function on Sundays and holidays and allow for the proper amount of linen accordingly to carry us over such periods. Furthermore, a correct supply of linen is good insurance to prevent shortage in the event of a break down of machinery in the laundry.

In having the required amount of linen in circulation, the laundry can function in a more consistent fashion, this meaning, that we are operating with greater efficiency and lower cost. It will definitely eliminate the necessity of disrupting the laundry schedule to have a few articles done which may be in demand at the moment.

In many hospitals we often find there is a general disregard for the consistent replacement of linen. When this happens the proportionate amount of linen is not available and it not only affects the patient but the entire service as well. In order to illustrate this point, we wish to tell you about a hotel in Boston which has five complete sets of linen in circulation per bed, at all times.

One set of linen is in the room when the guest arrives

The second is waiting to be laundered

The third is in the process of laundering

The fourth is in the main clean linen room

The fifth is in the sub-linen room waiting to go into circulation

This is an ideal set-up and gives the hotel plenty of linen at all times.

Investment

Obviously, to have more linen in circulation means a greater investment. The actual cost in the long run is no greater, and many are of the opinion that the slower turn-over prolongs the life of the linen, in general. It also means a greater flexibility if properly controlled. Another point we wish to emphasize is that we should have sufficient space available for the proper storage of the clean and soiled linen, which aids in a more efficient control.

Maintenance

The linen and the laundry departments are closely related to the housekeeping department. In the smaller hospitals, undoubtedly, the best plan is to have the laundry function directly through the housekeeping department.

In the larger hospitals where the laundry is of such size as to become a major department, with its own superintendent in charge, then it should come under the supervision of the hospital administrator.

There is no definite way of determining the exact point at which this change in administration should take place. Regardless of the set-up, the maintenance of the linen must be carried on in conjunction with the support of the laundry, inasmuch as the laundry is in a position to detect torn linen, sending it to the mending room before it returns to the clean linen room.

In hospitals where the main linen room is separated from the laundry the issuing and maintaining of clean linen are housekeeping problems, and converting soiled linen into clean linen is a laundry problem.

Control of Abuse and Theft of Linen

The abuse of linen can be and often is the source of considerable expense to the hospital. We always have a small minority of people who seem to feel that because a towel or similar article has been used in the normal manner, that they can use it as a duster or floor wiper. Their attitude is, we have a laundry so no matter how soiled the linen is it will all come out in the wash.

Packing soiled linen into pillow slips sometimes causes the seams to split open, increasing the work of mending and often times requiring replacement which otherwise would not be necessary. Another cause of linen damage is the use of sheets in tieing up bundles of lining. This may cause the sheets to tear in the center prematurely.

The success of whatever system of linen control is used will depend upon the amount of time and effort given to it by the administrator and the laundry manager, cooperatively.

Linen Standard

The linen standard required per bed has risen steadily with the increase in nursing care per patient. It seems necessary today, to place in service six of every article for each bed and seven of such articles as, sheets and pillow slips where two per bed are needed. Here again, we feel it necessary to state that this is an individual problem directly dependent on the type of patient being treated.

Hoarding of Linen

Some head nurses seem to worry if they do not have an over-supply of linen hidden away, and the private duty nurse seems to be of the opinion that she should have a drawer full of linen in the pa-

tient's room. Hoarding linen will throw the entire system out of balance. The problem of storing linen in rooms and closets may only be solved by strict supervision on the part of the administrator and the head nurse.

Linen Losses

The problem of stolen linen has always been with us and probably always will be. A person with no scruples about stealing linen, does not mind the markings on the article, and if the name of the hospital is woven into the article, they regard this as an added attraction.

Some private duty nurses or general duty nurses on service, who have apartments, find the hospital stock of linen very handy to use instead of purchasing their own supply. This is a real problem for the person who issues the linen to solve. Doctors are sometimes the cause of missing hand towels. In order to save a moment, some doctors will start for the patient's room still drying their hands, and upon arriving there the most convenient place for the towel seems to be the waste basket. Eventually the towel is thrown into the incinerator with the rubbish.

Other doctors, intent on being economical, will put the towel in their pocket to be used later on their rounds, and sometimes, inadvertently, take it home with them—and it is never returned to the hospital.

Another thought which comes to our mind is that there is not only the possibility of having linen appropriated without permission, but there is also the possibility of having it returned to be laundered, again. This matter of linen theft is a serious problem, and we would suggest that, in extreme cases, it might be well to follow the trend of the department stores, and require all employees to use the same entrance and exit, for some check on the situation.

The Marking of Linen

There are many systems in operation for the marking of linen. We believe that a good way is to mark the linen with indelible ink, or to have the name of the hospital woven into the article. We recommend showing the date the linen was issued, since this serves to advise how long the article has actually been in circulation.

Supplying and Gathering of Linen

Linen may be gathered from the wards through the use of a high-sided truck or basket, and all baskets should have a special locking device. Furthermore, after the linen has been laundered it is very important to have it taken immediately to the main linen room and not left in the corridors in trucks or baskets. Trucks with removable canvas containers are excellent, inasmuch as the container can be washed frequently and kept in a clean sanitary condition.

Patients' and Employees' Laundry

The question of doing the patients' and employees' laundry presents itself from time to time, but we are of the opinion this work should be left to the commercial laundry. Hospitals would have to do this work without cost or at a nominal fee and of course volume only would make it worth while.

There may be some advantages in doing patients' and employees' linen but there are disadvantages as well—

First—there is always the liability for loss, which places the responsibility on the hospital

Second—there is always the possibility of infection

Third—there is always the possibility the hospital would be subject to taxation, should a sufficient income be realized.

In one of our local hospitals we understand they have requests from patients to have their personal laundry done. This work is being done at a small charge to the patient. Of course the fact remains that additional income helps the overhead, but we believe it has the complications and responsibilities mentioned above which must be taken into consideration.

Central Linen Room Requisition System

The central linen room system seems to be the ideal one. It is flexible enough to supply a ward that has a large number of incontinent patients and yet control the amount of linen being used on a ward with fewer patients.

This system of linen control permits more efficient operation of the laundry by allowing all the sheets to be washed and ironed in one continuous process and other articles in like manner. Mass production of similar articles reduces costs.

If the linen requisition slip is drawn up carefully, it will furnish all the necessary information at a glance, for instance, the ward number, or name, date, and the number of ward and private patients as well as the number of incontinent patients. The number of expected discharges may also be included.

This information is necessary to aid in the con-

trol of linen ordered. If two blank spaces are left after the name of the article, one may be used to tell the amount of clean linen on hand and the other the amount required the next day.

By inspecting the requisition, the administrator and the laundry manager can tell the general status of the linen required in a very short time. If these linen requisitions are made out by the head nurse and checked by the supervisor, the responsibility for errors or over-ordering can be placed immediately.

It may be that the various departments of the hospital with specialized needs, such as the operating room, case room, central supply and the out-patient department, should have linen marked for the individual department. The sorting and identification may be facilitated by either marking them with different colors or hemming them with different colored threads in addition to the marking.

Whatever linen system is used, a standard of linen needed to operate the system and furnish the patient with the required amount for his comfort should be set up by the administrator and the laundry manager.

We have mentioned that much care must be given in making out linen requisitions and the primary reason why the system may not be 100 per cent satisfactory is due to the fact that the person making out the requisition guesses at the amount of linen required and the result is either an under-stocked or an over-stocked system.

The Full Identification or Ward System

The ward system requires a full quota of linen to be marked for each ward and necessitates all linen being stored on the ward. Many times this takes up valuable space which might be put to better use. When the patient load is light, there is a tendency to use extra linen and when the ward is full of very sick patients there may be a shortage.

The ward system may also bring about an extra amount of work in the laundry. If a ward has only a few patients and therefore a small amount of linen, by washing it separately a higher cost per pound results. If it is combined with the linen from another ward it would necessitate sorting after ironing, which is an added expense.

In order to have this system function correctly the necessary amount of each article must be marked for a given department, and this amount must be determined accurately or else a situation may arise where one department may need to use linen marked for another department.

Worn-out linen would have to be replaced and marked immediately. In order to do this an adequate supply of new linen must be added as the old linen is discarded.

There is also the question of space available which will be taken up in sorting, inasmuch as not only are all the items broken down in classifications, such as sheets, pillow slips, etc., but even these classifications themselves must be sorted for the department to which they belong.

Linen Control or Even Exchange System

We should mention one more method, not because it would be applicable to many hospitals, necessarily, but because it was instituted to fill the need of a large institution, and therefore must contain all of the good qualities and still eliminate the weaker ones of any given system.

The method of distribution I refer to is known as the linen control or even exchange system. This is based on the idea that the hospital laundry and the commercial laundry are primarily the same, that the hospital linen room can be likened to the commercial laundry delivery room, and the individual hospital departments coinciding with the laundry's individual customers.

Where this system is used each department must be equipped with a definite quantity of each item it uses, as in the full identification system, the difference being that these linens are not marked for the department, but may be used anywhere.

When the linen becomes soiled it is delivered to the laundry in marked bags that are counted and listed for the purpose of returning to the department using it piece by piece, clean linen for soiled.

This system is possibly the most expensive to operate, but enables the hospital to record and check the use of linen by departments. It removes from the department, any necessity for requisitioning supplies, or day by day inventories, with a consequent saving of time and effort everywhere outside of the linen control department. The placing of the supply in each using department instead of the main hospital linen room keeps the linen where it is to be used and in such quantities as to safely cover any emergency twenty-four hours a day.

The chief value of this system, however, lies in the fact that through the recording of the transaction the hospital can draw accurate figures on which to base and control the quantities to be kept in circulation. The use of the linen per patient, per day, the cost of the replacement,

and any number of related statistics depends upon the policy of the hospital and how deeply it wishes to go into its linen problem.

In running this system all the work is sent to the laundry from a given ward and counted by the laundry and an even amount is returned to the ward constituting an even exchange. The fault with this system is the cost of operation, which for the greater number of hospitals is more than the results obtained. It was originally installed to control the amount of linen used and to check linen losses, but there will *always be linen losses,* and after all if more linen is needed, there is no alternative but to use more.

However, this system does enable the hospital to record and check linen by departments and also removes the necessity of departmental requisitions but it does seem that except in special cases which are confined to larger hospitals that checking by departments is not necessary.

Weighing of Linen

We do believe that the average hospital can benefit by weighing all linen. The total weight of the linen divided by the actual number of patients in the hospital would give the figures on the number of pounds per patient, per day being used.

The weight of the linen could be broken down into departments in order to tell how much work comes from the various wards. The amount of linen for each patient, per day, varies, but in the average general hospital this amount averages from ten to thirteen pounds per day, per patient. This includes linen from all parts of the hospital, and if the figures run below ten pounds it is safe to say that there is an insufficient amount being used, or the supply is inadequate. If the amount exceeds thirteen pounds, a check should be made to determine the cause for the excessive use of linen.

The Laundry Proper

There is much that can be said in connection with the proper planning of the laundry.

The location of the plant and its nearness to the source of steam supply is of vital importance. The laundry should also be convenient to the buildings housing the patients to avoid a long cartage of linen. The location needs differ in individual instances.

It is difficult to say what the proper equipment should be in each individual laundry. In other words, it is necessary to make a complete analysis of the work being done in the hospital in order to determine and plan for the proper size of the laundry and its equipment.

Naturally the laundry should be equipped with washing machines for washing and rinsing, extractors to remove the surplus moisture after washing, a flat work ironer for flat work, drying tumblers for the work that is dried but not ironed and presses and ironing boards to take care of the wearing apparel and nurses uniforms.

Other equipment is needed such as truck tubs, starch cookers, tables, and various jars or containers for supplies, etc. There should be no retraction of the work and no cross paths for efficient operation. Thought about future expansion should be kept in the foreground. Proper ventilation and light should also be considered since unpleasant working conditions result in a continuous turnover of labor, which lowers production and the general efficiency of the department. The layout is very important when we realize that each piece of linen is handled from twelve to sixteen times in its journey through the laundry. As far as individual equipment is concerned, there is no doubt that metal washers are not only more efficient and cost much less to operate where power, water and supplies are concerned, but also are much more sanitary than the wooden style of washers.

While we are on the subject, we should mention that it is to the hospital's advantage to use motor driven machines. In the first place, the machine may be placed to advantage without regard to line shaft and a lower operating cost can be obtained than with line shaft drive where the machine could be belt driven. With individual motors, the machine may be shut down when idle, and there is no power loss through belting, shafting, etc. The shaft driven belt type is a dirt collector, and neatness, sanitation, ventilation and light are important facts to consider in a plan. The belt driven plant also offers a greater potential danger hazard whereas the motor driven machines are or should be equipped with modern safety devices.

Wages of Employees

With the increase in wages to be considered, in keeping with the wages paid in other fields, something must be done to keep the costs down. Modernization and replacement of existing equipment will help us do this. There are many labor saving devices on the market some of which are used to advantage only in the larger hospitals. Others can be used in all sizes of hospitals, and each one of us should make a definite check up of his laundry to see if the costs can be reduced. A periodic check-up should be made of the ma-

chinery to eliminate fire hazards. Visits to other hospitals will keep us in touch with the work and we should avail ourselves of the services offered by reliable machinery and supply houses to further this line of thought.

In the laundry, we are using a vast amount of steam, hot and cold water, and these costs together with the payroll mean that the situation demands more attention than ever before. After all, we should be open-minded to any improvements which help to produce the work at lower costs, and still maintain a high quality service.

Nurses' Uniforms

One burdensome job in the laundry is the finishing of nurses' uniforms, which require considerable hand ironing. The finishing of these uniforms cannot be standardized because each nurse has her own ideas of how a uniform should look, and the results are pleats, tucks, flares, and frills of all kinds and each one is costing the hospital extra money to finish. The same is true of the interns' and housemen's suits. Almost all of these are fitted in the back and the trousers are flared on the bottom. The only thing that is uniform in uniforms today is the name.

If uniforms were really what the name implies, our finishing costs would drop considerably. However, research has brought out a new style machine, know as the mushroom press, which helps to lower costs in spite of the lack of uniformity. Regardless of this fact, there should be further standardization in uniforms which would result in a lower cost of finishing what is considered to be the greatest single item of expense to launder that we have.

Planning of Equipment

We should remember that perhaps it will not be very long before the time schedule of working hours will be changed to a forty hour schedule, and any changes in equipment should be made with this idea in mind. We definitely recommend too, that your department be sufficiently large enough for maximum hospital capacity.

Washing Formulae

The average washing formula including loading and unloading and the washing time takes about one hour. A so-called break, the first amount of water added to the washer, which might be said to take the place of the over-night soaking is regarded as a sort of conditioning process. The break is very important and the temperature should not be over 100 degrees Fahrenheit, since blood and albumen stains set in goods if the temperature is higher. Furthermore, bleaching and souring are not recommended for every load of linen due to the frequency with which the laundry has the linen returned, but these should be given periodically.

Washing

The washing of hospital linen contitutes a more complicated problem than that with which the commercial laundry has to deal. This is due to the different types of soil encountered and is made more complex by the medicinal stains. Adequate equipment and proper supplies are needed to produce high quality washing. Poor washing results invariably from worn out equipment, overloaded wash wheels, lack of timers, thermometers and water gauges, and improper supplies or the improper use of them. Lack of sufficient hot water supply at 100 degrees Fahrenheit completes to a large extent the general list of troubles in the wash room.

The supplies most commonly used are soap, alkali, bleach, sour, blue and starch. Soap is the best wetting out and cleaning agent known, but must be aided by the use of an alkali. Acid soil in linens reduces the alkalinity of a washing solution, and, therefore, should be neutralized at the beginning of the wash by the addition of alkali.

The action of soap and alkali may be compared to a football team. The alkali runs the interference and supports the soap, the soap being the carrier of the dirt. The alkali should be stronger than the alkali contained in the soap. A proper mixture of soap and alkali will remove most of the medicinal stains.

Sodium hypochlorite, commonly known as bleach is used for removing stains that are not removed by soap and alkali and to keep the fabrics white. Cotton has a definite yellow cast. All of this yellow is removed when the fabrics are finished at the mill, but upon exposure to air the yellow generally returns.

Therefore, bleaching is necessary, but not with every load mentioned as above and when used extreme caution must be exercised so that the tensile strength of the goods is not lowered.

Cotton fabrics have a tendency to absorb and retain alkali and soap. Therefore it is very necessary to regulater the number of rinses to remove these from the materials. Usually four to five rinses are necessary to accomplish this. Even then a very slight trace of alkali will remain in the fabric and as almost all water supplies are of an alkali nature, the combined total of alkali should be neutralized so as not to cause irritation and discomfort to the patient. This is done by

adding a small amount of harmless acid commonly called a sour, to neutralize the last trace of alkali and leave the fabric soft. The sour will also prevent linen from turning yellow during the ironing period.

White cotton fabrics are not always pleasing to the eye after repeated washings and to offset this apparent lack of whiteness, bluing is added to the last operation. This makes the finished pieces take on a blue white appearance that is very pleasing to the eye.

The entire washing process may be controlled by chemistry. A good laundry manager should have a working knowledge of titration. By means of these tests the entire washing formulae may be checked frequently and efficiency can be kept at the highest level.

Blanket Washing

Exceptional care must be given to the washing of blankets, especially all wool blankets. Shrinking is a definite problem and different soap should be used than is used for cotton and linen. A good rule is to investigate thoroughly the products used, for instance, cottons should be washed with soap having an animal base and animal products should be washed with soap having a vegetable base.

Extreme care should be taken never to allow a load of blankets to pound too hard in the washer. In other words, a high level of water should be carried with plenty of soap during the washing and the washwheel stopped when water is let out or added to the wheel. This prevents excessive drop in the washer which shrinks woolens.

Too hot water will cause damage and also the extraction process should not consume over several minutes. All wool blankets should never be dried in a drying tumbler and they should either be hung over poles to dry or dried in a regular dry room, for blankets where the exact size can be maintained. With some blanket dry rooms, blankets can be stretched back to their original size.

Here again on the question of proper supplies and proper treatment, we recommend that you contact any of the reputable machinery and supply houses and ask for their recommendations.

There are many factors which influence production in the average hospital plant, the most important of which are proper equipment and adequate hot and cold water supply. Another factor for the correct operation is the steam supply as all the work utilizes steam for ironing, drying, and finishing. Generally all laundry equipment is planned for operation on one hundred pounds steam pressure and this pressure should be maintained.

Steam Supply

As important as the steam supply is the return system. Proper return traps should be used, properly piped. Although steam is the best method for heating machinery, there are many hospitals so located and arranged that high pressure steam facilities are not used, and in these instances, gas and electricity are generally used. Unfortunately gas and electricity normally cost more than steam.

It would be our suggestion that in the small hospitals, considering the installation of a laundry, that they investigate the advisability of installing a small high pressure steam boiler, not only used to heat the machinery but used also for heating water for the laundry. Even in this state where boiler laws are very strict, a boiler under ten boiler horsepower capacity can be operated without having a licensed fireman, even though it is using over fifteen pounds' pressure.

Furthermore, it is possible that your hospitals are now using the main boiler for heating water for the hospital during the summer months, and in the summer it is possible that the small boiler referred to could be used for heating hot water to be used in other departments than the laundry itself at an appreciable saving.

Another thought is that the small high pressure boiler could possibly be used for sterilizing purposes and for steam pressure cooking. Certainly this is important enough for investigation should you have problems along this line.

Operating Costs

To make a complete study of total overhead and operating costs, would constitute practically a paper unto itself, and time does not permit my going into a serious investigation of them. Some are never considered in many hospitals and other hidden costs are hard to analyze. Nevertheless they are all present and I shall try to bring them to your attention.

1 Depreciation on investment
2 Interest on investment
3 Labor
4 Supplies
5 Water
6 Steam for heating water
7 Steam for heating machinery
8 Electric power
9 Rent

Naturally the total of the overhead and operating costs in any plant, depending on the above mentioned items is a variable item, and we therefore hesitate to quote any exact total cost figures to apply to a given situation. Furthermore, this varying the cost of supplies, padding and other charges constantly taking place, make this very difficult.

As a hospital grows larger, the cost of producing the work gradually becomes less, even considering that a great many of the smaller hospitals should produce work at a low rate.

From figures available we would say that the average cost to do all the work in the laundry, varies from 2 cents to 3½ cents per pound, according to the size of the hospital.

It is interesting to note, that in our hospital last year, the total laundry cost, including all of the above items, amounted to 4 per cent of the total operating costs to the hospital.

Accordingly with 4 per cent of the total cost of operating represented in the laundry, you will fully realize that the laundry is something that merits your thoughtful consideration.

We have available some interesting facts and figures which we would like to present to you.

Interest and depreciation in this department represents approximately 21 per cent of total cost. This on the basis of 10 per cent depreciation and 6 per cent interest and on the assumption that the investment has been made within a 10-year period.

Labor approximately 55 per cent.

Supplies including padding 7 per cent and steam and other operating costs including water and power constitutes approximately 17 per cent.

Furthermore, it is interesting to note that on the assumption of the use of the metal washer, approximately 42 gallons of water is used per patient per day in the laundry.

The average cost of modern up-to-date equipment, installed in an available space, the figures to include the necessary piping and wiring and the hot water heater, but not including any boiler, would run generally about $120 per bed. Naturally this figure is subject to some variation, being dependent on local conditions, etc.

In conclusion, may we say that the laundry makes a definite contribution to the patient's welfare and comfort, and must receive the enthusiastic interest and support of the administrator.

In seeking information for this paper, we have been impressed with the need of a scientific research bureau within our association to whom we would turn not only for assistance with laundry problems but for engineering and other administrative problems as well.

Medical College of Virginia Dedicates Its New Hospital

Dedication of the new six hundred bed hospital at the Medical College of Virginia, Richmond, took place on Founders' Day of the institution, Thursday, December 5, 1940. The new hospital, completed at a cost of approximately $2,500,000, with equipment, provides for two new services, neuropsychiatry and contagious disease, enlarged facilities for physical therapy and many other activities, including ample provision for teaching. At two o'clock in the afternoon the hospital was opened for inspection to the general public. On Tuesday night, December 3, a reception and hospital open house was observed at the new hospital for the local medical profession and specially invited guests.

The Court of Appeals of New York Interprets The Law of Privileged Communications

Editor's Note—The opinion of the Court of Appeals of New York, which is quoted in full, is of far-reaching importance to hospitals in other states. This decision will be referred to frequently by the Courts, as it establishes the law of privileged communications where hospitals are interested parties.

The Court says, in effect, that it will not interfere, by way of judicial legislation, to change the law relating to privileged communications. In other words, the medical man or the hospital cannot be compelled to make answer concerning the care and treatment of the patients within the hospital. It cannot be questioned that, from the point of view of the law, the decision is sound.

In the Matter of the Investigation by the Special Committee Designated by the City Council of the City of New York,

Respondent,

to Inquire into the Charges by the Lincoln Hospital Alumni Association in Regard to the Management of Lincoln Hospital, Bronx, New York,

v.

Sigismund S. Goldwater, Commissioner of Hospitals of the City of New York, and Rudolf Rapp, Medical Superintendent of Lincoln Hospital,

Appellants

Court of Appeals State of New York

Decided November 26, 1940

APPEAL by defendants from an unanimous order of the Appellate Division, first department, affirming an order of Special Term.

William C. Chanler, Corporation Counsel (*Seymour Quel* and *Oscar L. Tucker* of counsel), for appellants.

Thomas H. McManus for respondent.

LEHMAN, Ch. J. A special committee, appointed by the City Council of the City of New Work in accordance with section 43 of the Charter of the city (effective January 1, 1938) to investigate charges of negligence and maladministration in the treatment of patients at Lincoln Hospital, has issued and served subpoenas *duces tecum* addressed to the Commissioner of Hospitals of the City of New York and to the Medical Superintendent of Lincoln Hospital which required the production of specified records of the hospital, including: "All case records, reports, charts, diagnoses, x-rays and other records relating to the following patients," etc. The Corporation Counsel advised the Commissioner of Hospitals and subsequently confirmed the advice by letter that

> "No information acquired by physicians or nurses in attending a patient in a professional capacity may be disclosed in any trial or court proceeding by reason of the provisions of section 352 of the Civil Practice Act, except on consent of the persons treated or their duly authorized representatives. The privilege conferred by this section applies to hospital records or documents, as well as to the personal testimony of witnesses. In my opinion, the privilege is applicable to a Councilmanic investigation."

The Commissioner appeared before the committee and produced some of the records called for by the subpoenas, but refused to produce any case cards or records which would disclose

"confidential information relating to the diagnosis and treatment of patients."

Upon the application of the Special Councilmanic Committee an order was made by the Supreme Court directing the persons named in the subpoenas

"to produce before said Committee . . . all the books, papers, records, etc., mentioned and described in the respective subpoenas *duces tecum.*"

The Legislature has commanded that:

"A person duly authorized to practice physic or surgery, or a professional or registered nurse, *shall not be allowed* to disclose any information which he acquired in attending a patient in a professional capacity." (*Civ. Prac. Act, §352.*)

The Petitioner claims, and the courts below have held, that because the command is contained in the Civil Practice Act it prohibits disclosure of such information only as evidence in an action or special proceeding brought in a court of record, and that a court may compel a physician to disclose to a committee of the Council of the city information which the physician is forbidden to divulge to a court of justice.

This court has said that:

"The disclosure by a physician of information acquired in his professional character in attending a patient, where not made in the course of his professional duty, is a plain violation of professional propriety. But the statute does not prescribe a rule of professional conduct for the government of physicians in their general intercourse with society. The common law did not protect a physician from disclosing as a witness information acquired professionally from patients (*1 Green. Ev. §248*). The statute was intended to afford this protection and to protect the patient also. If a physician, disregarding the plain obligations of his situation, should, in conversation, disclose the secrets of his patient, he would, so far as we know, violate no statute, however reprehensible his conduct would be. The statute should have a broad and liberal construction to carry out its policy. By reasonable construction it excludes a physician from giving testimony in a judicial proceeding in any form, whether by affidavit or oral examination, involving a disclosure of confidential information acquired in attending a patient, unless the seal of secrecy is removed by the patient himself." (*Buffalo Loan, Trust & Safe Deposit Co.* v. *Knights Templar & Masonic Mut. Aid Assn.*, 126 N. Y. 450, at p. 455.)

Though at common law a physician, unlike a member of the bar, might be compelled to divulge as a witness information acquired by him under the seal of professional confidence, yet in the Civil Practice Act the privilege and duty of a clergyman to refuse to disclose a confession (§351), the privilege and duty of a physician to refuse to disclose information acquired in attending a patient in order to enable him to treat the patient (§352), and the privilege and duty of an attorney to refuse to disclose confidential communications from a client (§353), are accorded the same statutory recognition, sanction and protection. All three sections apply to "*any examination of a person as a witness* unless the provisions thereof are expressly waived upon the trial or examination by the person confessing, the patient or the client." (§354.)

Doubtless, as the court pointed out in *Buffalo Loan, Trust & Safe Deposit Co.* v. *Knights Templar & Masonic Mut. Aid Assn.* (126 N. Y. 450, 454),

"the *primary* purpose of the section was to declare the rule governing the examination of a physician as a witness in *judicial proceedings.*" (Italics are new.)

All the sections to which we have referred are part of article 33 of the Civil Practice Act, which is entitled "Evidence," and the term evidence is applied ordinarily to proof received in judicial proceedings. Nevertheless, the statute in terms applies to "any examination," and as this court said in the opinion from which we have quoted: "The statute should have a broad and liberal construction to carry out its policy." The issuance of subpoenas by legislative and administrative bodies or officers as well as by a court, the effect of service of a subpoena, the penalty for disobedience to a subpoena properly issued and the proceedings to compel obedience, are defined or regulated by sections 403 to 408 of the Civil Practice Act, which, like the sections invoked by the appellants, are part of the article entitled "Evidence." The policy of the legislative prohibition against the disclosure of information obtained under the seal of professional confidence, as provided in sections 351 to 354 of article 33, would not be carried out if the court read into those sections a limitation which would render them inapplicable in any proceeding brought pursuant to provisions of the same article to compel such disclosure. The statute does not provide such a limitation in express terms, and there is no ground for reading such a limitation into the statute by implication. That would not be a "broad and liberal construction"

of the statute but a distortion of its language and purpose.

The statutory privilege was conferred upon a physician by two Revised Statutes ([*1st ed. 1829*] *p. 406, §73*). This court has pointed out that the revisers in their notes say:

> "Unless such conversations are privileged men will be incidentally punished by being obliged to suffer the consequences of injuries without relief from the medical art, and without conviction of any offense. Besides, in such cases, during the struggle between legal duty on the one hand, and professional honor on the other, the latter, aided by a strong sense of the injustice and inhumanity of the rule, will, in most cases, furnish a temptation to the perversion or concealment of the truth, too strong for human resistance." (*People* v. *Austin*, 199 N. Y. 446, at pp. 451, 452.)

The Legislature which has conferred the privilege may, if it chooses, limit its application. The courts may not do so.

The question of whether the privilege of a physician or a minister of religion may be asserted by a witness under a subpoena issued by a legislative committee or a person clothed with powers to hold investigations to compel the attendance of witnesses has never been directly presented to this court, but we have said that:

> "Those who are made witnesses in virtue of those powers are entitled to all the privileges and protection extended by the law to witnesses in judicial proceedings." (*Matter of Hirshfield* v. *Hanley*, 228 N. Y. 346, 349.)

We now hold that the statutory privilege may be asserted whenever the power of a court is invoked in manner authorized by the provisions of article 33 of the Civil Practice Act to compel a witness to disclose information which under other provisions of the same article he is forbidden to disclose. (Cf. *Matter of Doyle*, 257 N. Y. 244; *McMann* v. *Securities & Exchange Commission*, 87 Fed. Rep. [2d] 377.)

The orders should be reversed and the application denied, without costs.

FINCH, J. (dissenting). It does not seem to me that we are compelled by statutory mandate to deny to a legislative committee whose avowed purpose is to uncover abuses the right to ascertain facts.

As has been pointed out, at common law the information acquired by physicians or nurses acting in a professional capacity was not privileged. (*Buffalo Loan, Trust & Safe Deposit Co.* v. *Knights Templar & Masonic Mut. Aid Assn.*, 126 N. Y. 450, 454; *People* v. *Austin*, 199 N. Y. 446, 451. See Wigmore on Evidence [3 ded.], §2380.) But this State, in 1828, was responsible for the legislative innovation embodying such a doctrine. (Wigmore, op. cit., §2380, *Howe* v. *Regensburg*, 75 Misc. Rep. 132, 134.) However, long ago, in construing this new privilege created by statute, this court stated that

> "the primary purpose of the section was to declare the rule governing the examination of a physician as a witness in judicial proceedings." (*Buffalo Loan, Trust & Safe Deposit Co.* v. *Knights Templar & Masonic Mut. Aid Assn.*, 126 N. Y. 450, 454.)

In the case at bar we are concerned with a "legislative proceeding" to which the statutory rule should not be extended unnecessarily. The distinction seems eminently sound. In a "judicial proceeding" the Legislature has specified in the Civil Practice Act that no disclosure shall be made. But where we are concerned with a "legislative proceeding" there arises the transcendent interest of the People of the State in the enactment of proper laws for the conduct of government, as to which it is not unreasonable to require that the protection of the individual by privilege must bow as against the welfare and protection of large masses of citizens. It is urged that if we so deal with the physician-patient privilege that we must accord like treatment to other privileges, but this does not follow since each privilege rests upon its own background.

Upon the results of the investigation for which the withheld information is sought in the case at bar, depends the action of the City Council in reference to the management of the city's own Lincoln Hospital, perhaps vitally necessary for the protection of the public of the city of New York. I am unwilling to assent, therefore, to the proposition that the State Legislature or its delegated authority, the City Council, are so circumscribed that the alleged maladministration may continue unchecked, by virtue of a "liberal construction" of section 352 of the Civil Practice Act.

The orders should be affirmed.

LOUGHRAN, RIPPEY, SEARS and LEWIS, JJ., concur with LEHMAN, Ch. J.; FINCH, J., dissents in opinion in which CONWAY, J., concurs.

Orders reversed, etc.

Hospital Service Plan News

Prepared by the Commission on Hospital Service and the Council on Hospital Service Plans

THE 66 approved nonprofit hospital service plans are supported through service-contracts with 1900 member-hospitals in 29 states and one Canadian province. These figures refer to the location of hospitals only, and exclude all duplications of hospitals located near state lines giving service benefits to the subscribers of more than one approved plan. The number of member-hospitals were supplied by the hospital service plans for inclusion in a directory which will record the subscription rates, hospital service benefits, and member-hospitals of the associations approved by the Commission on Hospital Service of the American Hospital Association.

The total member-hospitals include nearly all institutions of standing in the areas served by approved plans, and represent a large proportion of the bed capacity of nongovernmental general hospitals in the United States.

A preliminary analysis indicates that the capacity of the 1900 member-hospitals exceeds 210,000 beds, exclusive of bassinets. This number is approximately 70 per cent of the bed capacity of the nongovernmental hospitals for acute illnesses in the United States, and in some states the percentage is considerably higher. Included among the member-hospitals are some city and county institutions which accept paying patients from the general public. Conversely, there are excluded from the total certain proprietary and local governmental institutions which accept subscribers, but which, according to law, may not become member-hospitals.

The following table lists the states in descending order of the number of member-hospitals, as of December 1, 1940:

State	*No. of Plans in State*	*No. of Member-Hospitals*
New York	9	330
Pennsylvania	4	184
California	3	169
North Carolina	2	152
Massachusetts	1	141
Illinois	6	124
Michigan	1	116
Ohio	8	96
New Jersey	1	85
Minnesota	1	66
Missouri	2	66
Alabama	1	52
Oklahoma	1	44
Iowa	1	39
Wisconsin	1	31
Maryland	1	30
Virginia	5	30
Connecticut	2	27
Maine	1	26
Colorado	1	14
District of Columbia	1	12
Kentucky	2	12
Rhode Island	1	12
Georgia	2	9
Louisiana	3	9
Delaware	1	7
Manitoba	1	7
West Virginia	1	5
North Dakota	1	4
Tennessee	1	1
Total	66	1900

Committee Activities

The Committee on Rural Development of the Conference of Hospital Service Plans met in Chicago on December 14, 1940. The Committee members, including Ray F. McCarthy, chairman; Graham L. Davis, Fred P. G. Lattner, Virginia Liebeler, and Leon R. Wheeler outlined their annual report to be presented at the Mid-Winter Conference of Hospital Service Plans in New Orleans in February, 1941.

Each member of the Committee was given a special subject for research and study, the conclusions of each study to be incorporated into the final report. These individual studies will be based upon the experiences of the members in the enrollment of the rural population in their particular areas.

Favorable Experience Continues

The data submitted to the Research Program and Information Bureau indicate that the financial experience of nonprofit hospital service plans during the first nine months of the year 1940 has been favorable. Twenty-one plans, each with more than 20,000 participants, representing ap-

proximately two-thirds of the total enrollment on September 30, 1940, reported total income in excess of $18,000,000. Of this total income, 70.9 per cent was used for hospitalization; 13.2 per cent used for operating expenses; 15.9 per cent allocated to contingency reserves. The six largest plans of this group, with a membership of more than 2,500,000 participants and an income of $13,500,000 for the nine months period, spent 73.1 per cent for hospital care; 13.1 per cent for administration; allocated 13.8 per cent to contingency reserves.

Preliminary data for the last quarter of the year 1940 indicate a continuance of the general trend during the first nine months. In addition to the favorable utilization experience, plans generally are reporting increased enrollment activities. The following general statements appear to describe the situation throughout the country:

The approved nonprofit plans experienced favorable utilization during the first three quarters of the year 1940; ratios of demand for service decreased during the late summer and early fall months, and the decreased utilization has continued throughout the fourth quarter during the year 1940; enrollment in plans has been accelerated during the months of October, November, and December.

Excerpts

Connecticut Plan for Hospital Care, Robert Parnall, general manager, recently sent a letter to all members of the Board of Directors of the Plan which said, in part:

> ". . . It may be of interest to you to learn that the Plan has, since its inception (February, 1937) paid out for the hospital care of 25,000 of its members slightly over one million dollars ($1,089,695.00). More than one-half of this ($586,271.00) has been paid out during the first ten months of 1940. . . .
>
> "The new basis for enrollment is apparently proving more successful each month. The membership acquired during October, which becomes effective December 1, totals approximately 3200 persons. . . ."

* * *

The Detroit Free Press, in an editorial dated November 15, 1940, stated:

> "A total of 290,000 persons making prepayment of their hospital care costs; $800,000 paid to hospitals for service provided for 17,000 subscribers. . . . Thus runs the report by Director John R. Mannix of the first twenty months of the Michigan Hospital Service's work.
>
> "It is a commendable record, demonstrating beyond doubt or cavil the merit of this health innovation. Pre-payment programs, here and elsewhere, not only assure subscribers low-cost hospitalization whenever the need arises, they help to keep hospitals on an even keel financially and are factors in stabilizing the income of medical men whose economic fortunes are notoriously either feast or famine. . . ."

* * *

Dr. George R. Critchlow, Director, Western New York Medical Plan, Inc., Buffalo, addressed the Richmond Academy of Medicine on November 26, 1940. In speaking of medical service plans Dr. Critchlow stated that the success of a plan will depend upon the wholehearted support of the medical profession of the district where the plan is in operation, upon their realization that it is their plan and their answer to the accusation that they are doing nothing to meet the needs of the people for adequate medical care. The basic principle underlying any plan that will appeal to the medical profession must be the preservation of the personal confidential relationship of the physician and his patient, with absolute freedom of choice guaranteed the patient.

Carl M. Metzger, executive director of the Hospital Service Corporation of Western New York (which works jointly with the Western New York Medical Plan, Inc.) who also spoke at the Richmond Academy of Medicine on November 26, says:

> "No profit making commercial insurance company can offer an adequate protection for medical service at a premium which is within the ability of the average working man to pay. Only the medical profession itself can inaugurate and maintain a satisfactory medical plan and to do so entails sacrifices on the part of the doctor."

* * *

The December 7, 1940, issue of the Jackson County Medical Society *Weekly Bulletin,* Kansas City, Missouri, includes an article on cooperation between the medical profession and nonprofit hospital service plans which states:

> ". . . Do you (the medical profession) realize it is the only type of plan where you as the doctor have absolute authority and are trusted implicitly as the sole claim agent? It is entirely up to you to say if the patient deserves to be hospitalized, for how long, and when he should go home. . . ."

* * *

A majority of the newspapers, daily and weekly, published in western Pennsylvania are enrolled in the Hospital Service Association of Pittsburgh.

Abraham Oseroff, executive vice-president of the Association, says:

"This is important, not only in terms of increased membership but especially from the standpoint of making the newspapers familiar with the hospital-sponsored provisions of the movement as a result of actual participation. Such personal contact with the plan is an aid in having the newspapers inform their readers correctly and fully about the project."

Continuing, Mr. Oseroff states:

"Despite the obvious cooperation of such newspapers which is tangibly expressed in their willingness to cooperate in publishing releases, all caution should be exercised to insure that no one in the newspaper gets the idea that the plan seeks to have such releases published merely through 'cooperation.' The underlying motive in submitting releases to the newspapers must be the news value they contain. This is of vital importance, especially to those plans which have been operating for years. . . .

"City editors, their assistants, rewriters and reporters who have had experience with the plan, either from personal hospitalization or through the members of their families, are profuse in their praise of the movement just the same as are other individuals, and the important thing is they are able to do something about it."

New Low-Cost Service Plan

A "Standard Service" plan (offering ward accommodations) is now being offered to the residents of the area served by the Hospital Service Association of North Eastern Pennsylvania, George T. Bell, Jr., executive director. The rates for this type of service are as follows:

$0.50 per month for an individual; $1.10 per month for husband and wife; $1.40 per month for husband, wife and all dependent children, as compared with $0.80; $1.45 and $1.90 respectively for semi-private accommodations.

* * *

The Piedmont Hospital Service Association of Lynchburg, Virginia, recently approved the issuance of an "essential service" contract priced to reach employed workers in the low-income groups. Hospital service benefits are unchanged, except that board and room service will be provided in $3 per day accommodations. Weekly subscription rates are as follows: employed male, 10 cents; employed female, 15 cents; husband and wife, 30 cents; husband, wife and one child, 30 cents; husband, wife and all dependent children, 35 cents.

New Participating Hospitals

Minnesota Hospital Service Association: Rice Memorial and Willmar Hospitals of Willmar; Northern Minnesota Hospital of International Falls; Hanover Hospital, Littlefork.

Northern Illinois Hospital Service Plan, Rockford; Morrison Hospital, Morrison, Illinois.

Hospital Service Association of Pittsburgh: Ellwood City Hospital, Ellwood City; Jameson Memorial and New Castle Hospital, New Castle.

Personnel

William McKenna, formerly service manager for International Business Machines Corporation in Metropolitan St. Louis, has been named supervisor of the business machine department of Group Hospital Service of St. Louis.

* * *

Campbell B. Chase has been named district manager of the Michigan Hospital Service in the Albion area.

* * *

C. J. Foley, administrative assistant to Ray F. McCarthy, executive director of Group Hospital Service of St. Louis, has resigned to accept the position as managing editor of *Hospital Management*.

Milestones

Associated Hospital Service of Maine celebrated its second anniversary on November 22, 1940. The executive director, Paul A. Webb announced that during the two years of the Plan's existence, more than 22,000 persons had been enrolled; 28 hospitals (approximately two-thirds of the hospitals in the state) had become participants in the plan; 2259 members were hospitalized under the plan; more than $100,000 were paid to the hospitals on behalf of hospitalized members.

* * *

Group Hospital Service, of St. Louis, organized in April, 1936, has taken 2400 square feet in addition to their present 4100 square feet at 3607 Olive Street. They moved into their new quarters on December 15. Increased enrollment and the addition of twelve new employees since September 1, 1940, necessitated the increase in floor space.

* * *

With the close of the year 1940, the Hospital Service Association of Pittsburgh completes three years of operation. When the hospital-sponsored project was launched in January, 1938, only about a dozen hospitals, all of them in the immediate Pittsburgh district, were participants. Today there are 79 hospitals participating, located throughout all of western Pennsylvania.

* * *

The annual report of Associated Hospital Service, Inc., Milwaukee, L. R. Wheeler, executive di-

rector, states that in the short period of less than ten months since the first subscriber's contract became effective on January 1, 1940, the Association has developed from an embryonic state into a well organized, smoothly functioning institution.

From their beginning activities in Milwaukee, the Service has been extended to thirteen other areas, at the request of the hospitals in the following cities: Ashland, Baraboo, Fond du Lac, Ironwood (Michigan), Kenosha, Madison, Merrill, Racine, Stevens Point, Superior, Tomahawk, Waukesha and Wausau. Contractual arrangements for the guarantee of benefits to subscribers have been made with thirty-one voluntary hospitals in these cities.

As all records are centralized in the home office in Milwaukee, no branch offices have been established. The Plan has assigned enrollment representatives who work exclusively in specific areas in the state so that the various communities are adequately serviced. These representatives are headquartered in Fond du Lac, Wausau, Madison, Racine, and Kenosha, but make periodic canvass of all territories.

* * *

The semi-annual report of the Hospital Service Plan of New Jersey shows that nearly $2,000,000 in benefits for over 31,000 hospital cases have been paid directly to hospitals since the date of organization, 69 per cent of the subscribers hospitalized used semi-private accommodations, 28 per cent selected private accommodations and 3 per cent used eligible ward accommodations.

Contemplated Plans and Legislation

The Governor of the State of Indiana has reorganized the Commission for the study of nonprofit group hospitalization plans for the state with the following newly elected officers: Edgar Blake, chairman; Winfield K. Denton, vice-chairman; Dr. John W. Ferree, secretary.

A special committee consisting of Edgar Blake, Dr. Cleon Nafe, W. Roland Allen, and John Cramer has been appointed to prepare legislation relative to the formation of group hospital service plans.

* * *

A group hospitalization plan for Fort Smith, Arkansas, and area (to be known as the Sebastian County Community Group Hospitalization Plan) has received the endorsement of the Sebastian County Medical Society. The participating institutions will include St. Edwards and Sparks Hospitals. Membership in the Plan will be available to all employed persons in the area, urban and rural.

* * *

Peter E. Klein, executive director of the North Dakota Hospital Service Association, is assisting the Montana Hospital Association in setting up their preliminary papers to form a nonprofit hospital service association for the state of Montana. Mr. Klein spent some time during the past month in Billings conferring with the officials of the Montana Hospital Association.

News from the Plans

Vol. 1, No. 5 of *Blue Cross News*, published by Minnesota Hospital Service Association, states:

> ". . . An applicant subscriber who leaves the employment where he has participated in the hospital service plan, may retain his contract for the balance of the contract year whether he is employed or not by making his regular payments directly to the Service Association office. Payments must be made semi-annually or annually to help defray the cost of carrying individual subscribers.
>
> "At the beginning of the new contract year, however, the applicant subscriber must be re-employed (not necessarily where a hospital service group has been established) to be eligible for renewal of his contract. . . ."

* * *

H. Gayle Bourne, director of enrollment for Associated Hospital Service of Baltimore, on the Eastern Shore of Maryland, has offices in the Cambridge-Maryland Hospital, Cambridge; Emergency Hospital at Easton; Peninsula General Hospital at Salisbury.

Recent Speeches

Henry G. Brickman, representative of Associated Hospital Service of Massachusetts, Boston, addressed the Massachusetts Association of Medical Record Librarians on December 5, 1940.

Paul F. Bourscheidt, executive director of Central Illinois Hospital Service Association, Peoria, Illinois, addressed the Kiwanis Club of Bloomington, Illinois, on November 26, 1940.

H. C. Stephenson, managing director of Hospital Plan, Inc., Utica, New York, spoke before the Keeseville, New York, Kiwanis Club on November 21, 1940.

Walter R. McBee, executive director of Group Hospital Service, Tulsa, Oklahoma, addressed the Cushing Oklahoma Rotary Club on November 7, 1940.

Ray F. McCarthy, executive director of Group Hospital Service of St. Louis, spoke to the trustees and staff of the Central Hospital Service Association, Columbus, Ohio, on December 9, 1940.

J. D. Colman, executive director of Associated Hospital Service of Baltimore, recently addressed a representative group of Eastern Shore (Maryland) employers.

Study of Sick-Leave at Worcester State Hospital

WALTER E. BARTON, M.D.

HOSPITAL and industrial organizations favor the practice of keeping the employee who is ill on the payroll for a stipulated period of time. Health hazards exist in the hospital which may cause the employee to be absent from work through no fault of his own. Compensation paid for time lost through illness brings a sense of security and satisfaction in the job. As a result the hospital is able to attract and hold a better class of personnel.

The Commonwealth of Massachusetts in its "Regulations" issued in 1935 by the Department of Mental Health to govern the policies of its member hospitals states that "compensation for time off because of illness or injury shall be determined by the superintendent." This authority had been interpreted prior to 1938 at the Worcester State Hospital to compensate illness of administrative officers and certain individuals in the general employee group with long periods of service. It was felt desirable to institute a "sick-leave" plan to insure compensation to all permanent employees against time lost due to sickness arising out of the hazards to health that exist within the institution.

At the outset of our endeavor to formulate a plan there were misgivings. The budgetary margin available for the test was extremely modest. It was felt that perhaps some employees might take advantage of any plan and sickness rates might skyrocket. Narrow limits of safety on ward coverage might further be jeopardized if a considerable number of employees took advantage of paid time off for sickness. Some of these doubts were found to have a basis in fact but after a trial period of two years the plan has been retained. The following report is given in the hope that others, who might hesitate to embark on a sick-leave compensation plan, will be interested in its successful operation in this institution.

A hospital of 1790 mentally ill patients, a continued treatment division of 580 beds, two farm groups each with 35 patients, a mental health clinic and a child guidance clinic, and a research division comprise a unit that employs 665 persons.

Dr. William A. Bryan, then superintendent of the Worcester State Hospital, appointed a committee of six persons to formulate a suitable plan for sick-leave to meet the needs of all of the employees of our hospital. After the installation of the program in June of 1938 the committee was retained to rule on all special problems that might arise.

A minimum of 12 months of service was established as a pre-requisite to secure a sick-leave with pay. It was felt that the employee who becomes ill soon after employment or who is only a temporary staff member naturally is not entitled to receive sick-leave with pay any more than to a vacation with pay.

The personnel of the hospital was divided into two groups. Group 1 consisting of all general employees working on a per diem or 48 hour a week basis, and Group II comprising persons in administrative posts and positions of responsibility that required their being available for duty any time in the 24 hours of the day. In this latter group were physicians and departmental heads, many with long years of service, who it was felt, might be entitled to longer periods of compensation if disability arose due to illness. For such cases the superintendent continues to make individual judgments.

Organization of Plan

To members of Group I, twelve working days are granted as a maximum time for which compensation for sickness is paid in a single year.

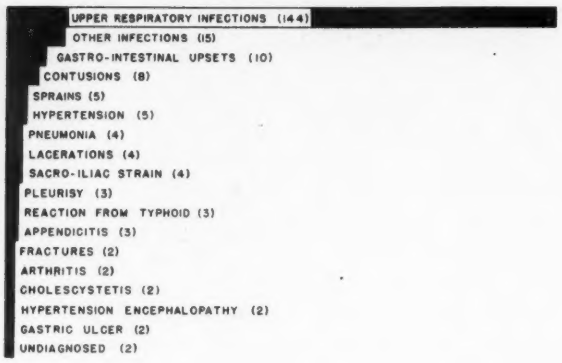
The Author

● Dr. Walter E. Barton is Acting Superintendent of Worcester State Hospital, Worcester, Massachusetts.

Presented at the American Hospital Association Convention, Boston, 1940.

GRAPH I

DIAGNOSES OF 220 PERIODS OF SICKNESS IN 1938-1939



There is no provision for year to year accumulation of sick-leave time. In order to secure pay for sickness in line of duty, the employee is required to present a certificate signed by a physician in practice in the community or by a physician on the medical and surgical staff of the hospital, certifying the dates of home or office visits. The number of days the employee was unable to work and the diagnosis of the illness was required also, the latter in order to ascertain whether or not the sickness could have been acquired in line of duty.

The hospital agreed to render, whenever possible, a reasonable amount of hospital care to employees who were ill, usually interpreted as three weeks of hospitalization. No medical attention is provided at the employee's residence. No elective surgery is done at the hospital's expense.

A sick-leave report card is kept on file in the treasurer's office. It lists in summary form the diagnosis, the days of work lost, together with the days and amount paid for in compensation.

Operation of Plan

During the fiscal year, December 1, 1938, to November 30, 1939, a total of 299 employees (45 per cent of the 665 employed) were sick. Two hundred twenty-five of these had one period of illness, 61 two periods, 9 three periods and 4 four periods. It seemed to us that when second absences occurred shortly after the first, in about 20 per cent of the cases, insufficient time had been allowed for recovery. There were, therefore, 390 periods of sickness during this year. Not all of the 299 employees ill in the year received compensation. Only 200 qualified under the sick-leave plan. Graph I shows that upper respiratory infections were by far the most frequent cause of disability. In addition to illness shown in the graph there were 30 miscellaneous disorders, one case of each as follows:

Extractions of teeth
Atonic constipation
Asthenia
Umbilical hernia
Scabies
Lymphadenitis
Sunburn
Acute conjunctivitis
Hemorrhage from tooth extraction
Cerebral thrombosis
Sudamina
Strangulated hemorrhoids
Hemorrhoids
Scarlet fever
Catarrahal jaundice
Thrombophlebitis
Epidermo-phytoses of hands and feet
External otitis
Vaginal bleeding
Cardio-vascular disease with hypertension
Acute anemia
Cervical adenitis
Hypertensive heart disease
Cerebral hemorrhage
Pulmonary hemorrhage
Fibroid uterus
Nervous exhaustion
Lumbo-sacral strain
Angina pectoris
"Sore elbow"

Also not included in the graph were 140 periods of illness comprising a total of 537 sick-days occurring in 99 people who failed to comply with sick-leave requirements and on whom no statistical cards were kept. About half (49) of this latter group were ineligible because they had been in the employ of the hospital for less than a year. Nine of the number were paid ($114.16) for 34 days of absences without presentation of certificates of illness on the authority of the superintendent exercising his right of exception. The remaining 41 did not apply for payment either because their absence from duty was not due to illness acquired at the institution or because it was an inconvenience to present a certificate for a single day's time lost or possibly because they wished to use illness that did not actually exist as an excuse for absence.

Graph II shows the average number sick by months compared with the control year, December 1, 1937, to November 30, 1938, during which no compensation was paid.

In Table I the mean number of employees ill per day and the percentage of the total sickness that occurs in a given month is compared in the sick-leave and control year. As would be expected the late spring and summer months have lower

GRAPH· 2

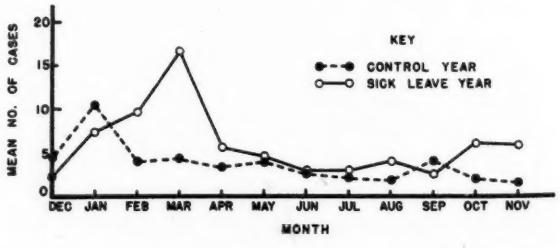


Table I

Mean number of employees ill per day and the percentage of the total number of employees sick by months in the Sick Leave Year and Control Year.

	Dec.	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*
SICK LEAVE YEAR												
Mean sick per day.....	2.2	7.3	9.6	16.6	5.5	4.5	3.0	3.0	3.9	2.6	6.1	5.8
Per cent of total sickness.....	3.2	10.3	12.7	24.2	7.8	6.5	4.3	4.4	5.7	3.7	8.9	8.2
CONTROL YEAR												
Mean sick per day.....	4.4	10.4	3.9	4.2	3.2	3.8	2.6	2.1	1.8	4.1	1.9	1.5
Per cent of total sickness.....	10.2	24.2	8.1	9.7	7.2	8.7	5.8	4.8	4.2	9.2	4.3	3.4

incidence of illness where as in January, February, and March from 42 per cent to 47.2 per cent of all the year's illness may be expected to occur.

From Table II it may be seen that the mean number of employees sick per day was 5.8 with a range of from 0 to 25. The mean duration of sickness in days was 6.9 and the total days of sickness was 2069. For time lost under sick-leave plan 1251.5 days salary was paid, plus 34 days by special approval. Table II offers a comparison also of the number of employees sick, the number sick per day and the total days and periods of illness between a year in which compensation was paid and one in which it was not. In the control year 227 employees were sick. Of these 173 employees were ill once, 44 twice, 8 three times and 2 four times during the year.

The number of employees sick one day, number ill two days, three days, etc., is illustrated in Table III. About 65 per cent of all were absent less than a week. There is a significant increase in the number of employees ill in the compensation year as compared to the control year when payment was not available for time lost. This increase (all probabilities $< .01$) holds also for the number of days and periods of sickness. Table IV and V. The increase in sickness during the paid year was general and cannot be blamed on any particular group, as we found when we considered the sexes separately, and also the various hospital departments such as medical, nursing, food service, maintenance men, etc.

Table II

A comparison of number of employees sick, number sick per day, and also total days and periods of illness in a year during which compensation was paid and one in which it was not.

	Control Year	*Sick Leave Year*
Number of employees on payroll.....	662	665
Total number of employees sick.....	227	299
Total days of sickness.....	1292	2069
Total periods of sickness.....	293	390
Number of employees sick per day:		
Mean	3.7	5.8
Range	0–19	0–25
Mean duration of sickness (days)....	5.7	6.9

About 30 per cent of male and about 55 per cent of the female employees were sick during the year 1938-1939. Of these 75 per cent were sick for one period only. When the male and the female workers were compared in the same payroll brackets, both in the control and the sick-leave year, twice as many females were ill as were males. Of the 200 employees ill and eligible under the plan, 85 sought the aid of family doctors, 107 consulted the hospital physicians and 7 were seen by both. One had no doctor. The 200 employees who were sick lost 1532 days from work. 1251.5 of these days were paid for under the rules providing 12 days of compensation upon proper physician's certificate, 280.5 days were lost by 128 employees for which they were not paid.

The total cost to the hospital for sick-leave during the year studied was $4214.55. The total payroll for personal services in 1938-1939 was $628,372.00. The cost of sick-leave was 0.66 per cent of the total outlay for personal services. In the sick-leave year the average cost for each employee having been ill was $14.09; the average cost per day of illness was $2.04.

In both the control year and the sick-leave year, injuries arising out of hazards of employment, resulting in disability exceeding seven days came under the jurisdiction of the Massachusetts Workmen's Compensation Laws. These absences were

Table III

Number of employees sick one day, two days, three days, etc.

Days of Sickness	*Number Sick*	*Days of Sickness*	*Number Sick*
1	41	15	11
2	34	16	3
3	31	17	2
4	22	18	5
5	23	19	4
6	17	20	1
7	25	21	0
8	9	22	0
9	15	23	2
10	8	24	0
11	10	25	0
12	12	26	1
13	7	27	0
14	15	28	1

excluded from our survey. In the study, therefore, are included only those cases of industrial injuries in which disability did not extend into the period covered by the Industrial Accident Plan.

Summary

A plan for compensation for illness that arises out of the health hazards of occupation is desirable. An increase in the security of income and satisfaction with the job have important effects on morale. The policy of payment of salary for time lost due to illness acquired in line of duty was adopted at the Worcester State Hospital. Compensation for 12 days of illness in a single year was allowed to persons who had 12 months' of service. The operation of this plan was entrusted to a committee of six employees who, as a board of appeal, arbitrated exceptions to regulations when they occurred. The plan was found to be comparatively inexpensive for the protection and service it gave to the 665 employees, $4214.55 (0.66 per cent of a total expenditure of $628,-372.08) was the actual cost in salary paid for which service was rendered.

A mean of 5.8 employees of the group of 665 were sick on any given day with the range between 0 and 25. January, February, and March were months during which the greatest number of persons were ill on any given day. Forty-five per cent of all employees, 30 per cent male and 55 per cent female, had a period of illness during the year. The mean duration of illness in days was 6.9. Seventy-five per cent of those ill were absent for one period only during the year. There was a significant increase in number of employees sick, and in the number of days and periods of illness in the compensation year as compared with a control year. Because of the tendency to exploit sick-leave any system introduced must have certain requisites to compensation and most important, a physician's certificate as proof of illness.

Table IV

Days lost and number of periods of sickness by sexes in Sick Leave Year.

	Number of Employees	*Days Lost Through Sickness*	*Period of Sickness*
Men	106	708	132
Women	193	1361	258
Total	299	2069	390

Table V

Days lost and number of periods of sickness by sexes in Control Year.

	Number of Employees	*Days Lost Through Sickness*	*Period of Sickness*
Men	82	471	97
Women	145	821	196
Total	227	1292	293

The graph indicating the average number ill on any given day by months is a useful administrative guide in planning of vacations and personnel changes. In Janunary, February, and March, changes in the staff should not be made, nor should leaves of absence or vacations be granted as 42 to 47 per cent of the total year's illness will occur and deplete the ranks considerably during those months. Table I makes it possible to estimate the mean number of employees who will probably be ill on any given day during the year.

Conclusion

Compensation for illness is a worth while industrial practice that deserves a wider use in modern hospitals. Although there is a general increase in illness under a sick-leave plan it costs but little and has a beneficial effect on employee morale.

South Texas Hospital Council Honors Dr. and Mrs. Lucius R. Wilson

The South Texas Hospital Council turned its annual business meeting into a going away dinner for Dr. and Mrs. Lucius R. Wilson. The dinner was held at Memorial Hospital in Houston. Dr. J. H. Groseclose, the immediate past President of the Texas Hospital Association and President of Group Hospital Service of Texas made the farewell address representing the hospital people of Texas.

Mrs. Josie Roberts, of the Methodist Hospital of Houston, in behalf of the Council presented Dr. Wilson with a traveling bag.

Dr. Groseclose recounted many of the valuable services which Dr. Wilson had rendered to the hospital field of Texas during the twelve years he has been superintendent of John Sealy Hospital at Galveston.

Dr. Wilson leaves the first of the year for Philadelphia where he will become superintendent of the Hospital of the Protestant Episcopal Church.

Operating Room Management

Questions and Answers

MARGARET K. SCHAFER, R.N.

How long after scheduled time should the operating room be held for a surgeon when there are other patients scheduled and no other room is available?

No other problem in the operating room causes so much friction with and among surgeons than being delayed in starting operations on time because the previous operation did not start on time.

A method that has been quite successful is one in which the surgeon telephones the operating room supervisor if he is to be detained and states when he will be free to operate. If there is another surgeon posted to follow and it is evident the delay will necessitate postponing the next patient, the supervisor asks if he wishes to ask the surgeon posted to follow him to wait or if he will do his case at the next free hour, stating if possible when that will be. On the other hand if the surgeon fails to appear past the scheduled hour and has not telephoned, and it is evident the next patient and surgeon will be delayed the patient is returned to the ward and the next patient is taken to the operating room. When the surgeon is to be detained because of some delay with the patient, anesthetic, or operating room the surgeon should be notified by the operating room supervisor so he can make his plans accordingly.

What is the most reliable method of assuring efficiency of sterilization of surgical dressings and supplies?

Moist heat, which is steam under pressure in an autoclave, is the most efficient method of sterilizing dressings. The following suggestions should be observed to insure efficiency:

1 Autoclaves should be equipped with recording thermometers and temperature gauges on the exhaust line of the sterilizer to give accurate reading and record of temperature in the sterilizer.

2 A chemical indicator inserted in the center of drums and large packages to indicate the steam penetration.

3 Proper wrapping and packing of goods in the sterilizer is essential to insure steam penetration and air evacuation. Air and steam are reluctant to mix, the presence of air greatly reduces the ultimate temperature below that of pure steam, and throughout the sterilizing period the temperatures in the lower area of the sterilizer will be lower due to gravity and the reluctance of steam and air to mix.

Goods should be wrapped in double muslin or paper wrappers but not canvas or any waterproof material.

Metal drums should be turned on side in the autoclave.

Bundles and drums should not be packed too tightly and the size of the load in the sterilizer should not be crowded.

Metal cannisters or basins should be turned upside down or sideways in the sterilizer to exclude air.

4 The sterilizers should be routinely checked by the engineer to insure proper operation.

5 The sterilization of a known culture checked by a bacteriologist done periodically checks the other methods of control.

What is the best method of sterilizing:

The Author

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Presented at the Hospital Standardization Conference of the Clinical Congress, American College of Surgeons, Chicago, October, 1940.

rubber gloves; sharp and delicate instruments?

Rubber Gloves: The best method of sterilizing rubber gloves is in an autoclave, which should consist of:

1 The careful washing in soap and water (avoid tincture of green soap) and never allow gloves to soak in a solution or stand in water for a period of time.

2 Dry in a dryer furnished with adequate heat to remove all moisture from the rubber.

3 Test by inflating with air. Patch and retest damaged gloves.

4 Powder both sides evenly with talcum powder.

5 Sort gloves according to size and turn back cuffs.

6 Insert a layer of gauze or paper under cuff and between the thumb and palm of the glove, to avoid sticking together of the two rubber surfaces preventing steam penetration.

7 Insert a gauze pack or a folded paper towel inside gloves to allow steam to enter the inside of the gloves. The paper and paper towels have been found very satisfactory and a saving in time and money.

8 Place gloves in a folder similar to a bill fold or wrap in a towel in the same manner without folding the gloves or allowing the two gloves to touch. Rewrap in paper or muslin wrappers.

9 Sterilize in an autoclave for 15 minutes at 250 degrees F. (discharge line temperature).

10 Remove gloves from sterilizer as soon as dry.

11 If gloves are stored for 24 hours before use their life is lengthened.

Sharp Edged and Delicate Instruments: Almost all delicate instruments and scissors can be safely and efficiently sterilized in an autoclave if they are carefully arranged in metal trays or wrapped in a thin layer of gauze.

Sharp knives are usually sterilized chemically as follows:

1 Knives must be clean and free from oil before soaking. Some companies wrap knife blades in waxed paper, the wax adheres to the blade preventing the chemical from coming in contact with the metal. This wax can be removed by wiping the blades with ether.

2 Arrange the blades in a tray keeping the edges from touching the tray or other blades. A special metal rack made to hold blades has been found very helpful. If the tray and rack are autoclaved before adding the solution or the blades the danger of contaminating the blades or sterile forceps is minimized.

3 Soak blades for at least 30 minutes in a solution known to destroy as well as inhibit the growth of organisms, using a germicide, lysol solution, alcohol or propanol if a germicide as lysol, phenol or a mercurial is added. Remember no solution is magic so the mere rinsing will not insure sterilization.

Do many hospitals offer opportunity for postgraduate work in surgery for operating room supervisors? In general, what should such a course cover?

At present only a few hospitals offer courses for operating room supervisors. The majority of postgraduate courses only give additional operating room experience.

Such a course should include:

1 A good foundation in operating room experience if the student has not had this experience. It is suggested prospective supervisors have their experience before they attempt supervision or spend time in postgraduate study in general operating room work.

2 Instruction and experience should include:

a—Hospital organization and departmental management

b—Principles of supervision and personnel management

c—Construction, care, and maintenance of equipment

d—Ordering supplies and equipment including instruments

e—Some actual work with a supervisor to apply the above instruction

f—Some instruction in education and teaching methods, with practice teaching under supervision —almost all supervisors teach students.

g—The courses offered in ward administration and supervision in a number of universities have been found helpful to the operating room supervisor. Although these courses are planned primarily for ward situations the principles taught can be applied to the operating room.

Recent Legal Decisions Important to Hospitals

Court Decides County Should Pay Customary Charges for Regular Patients

General Hospital Society of Connecticut v. *New Haven County,* 14 *A. 2nd 2d* 746.

This was an action brought by the Hospital Society of Connecticut to determine whether the hospitals of the state could make charges in excess of $8 per day for patients cared for in those hospitals which had been sent to the hospitals by the county. There is a statute in Connecticut which prohibits hospitals from charging more than $8 per day for patients whose care is chargeable to the state, and for whom the state pays directly out of funds in its possession. The county urged that it should not pay more than the statutory sum since it was to be considered as an arm of the state, and since the funds came to it from the state to pay for the hospitalization of children from a home operated by the county, and to pay for the care of certain prisoners delivered to the hospitals by the sheriff of the county.

The court took the view that the hospitals should be permitted to make a charge based upon the usual charges for patients received from outside sources inasmuch as the statute in question used the word "directly" with application to funds of the state. In other words, if the patients were of a class for whose medical and hospital care the state paid for directly, out of its own funds, then the hospitals could not make charges totaling more than $8 per patient days. It was considered by the court that the county did not stand in the shoes of the state in making these payments, and that the county should be made to pay the customary, reasonable charges of the hospital for regular patients.

The decision, it is suggested, is well-founded, both from the point of view of logic, as well as from the standpoint of practicality. To force the hospitals to accept all patients at a rate at which they would lose considerable money would work a hardship on those hospitals. Then, too, the fact that the hospitals were in the position of having to accept the patients sent by the county is a factor which, while not entering into the issues of the case, presented an administrative problem of consequence.

Whether Charitable Hospital Has Been Guilty of Negligence in Selecting Employee

Miller v. *Sisters of St. Francis, et al.,* 105 *P. 2d.* 32.

This case, like a California case (*England* v. *Hospital of the Good Samaritan*), has a history of prolonged, complicated litigation. It first made its appearance in the reports as *Miller* v. *Mohr,* 198 *Wash.* 619, 89 *P. 2d.* 807. The Supreme Court of Washington reversed a judgment for the plaintiff in that case and concluded that the judgment should have been reversed because of the error in admitting certain testimony. The case was consolidated with that one against the Sisters of St. Francis, and the two cases proceeded to trial a second time. Thereafter, the defendant hospital filed a motion to strike the complaint on the ground that it was incorporated as a charity, and was therefore not liable for the negligence of its employees. However, the complaint alleged that the hospital had been guilty of negligence in selecting and maintaining in its employ the nurse in question. Therefore, the plaintiffs were permitted to go to trial on that one issue of negligence since it is the law that a charitable institution is ordinarily exempt from liability for the acts of its employees, but may be held liable if it can be shown that the particular charity has been guilty of negligence in selecting or in retaining in its employ the person whose wrongful act is alleged to have caused the injury.

The trial court, upon the second trial ruled that there was not sufficient evidence offered by the plaintiff to show that the hospital authorities had been guilty of negligence in selecting and retaining in their employ the nurse whose alleged negligence caused the injuries to the plaintiff's child. In this case, now before the Supreme Court of Washington, it was held that since, upon the former appeal, the plaintiffs had offered evidence tending to fix the liability of the defendant, the case should go back for a new trial. Therefore, the decision on the first appeal became what is known as the law of the case, and the Supreme Court of Washington was bound by that decision in arriving at its holding in this second appeal. The result is to make confusion of the question

as to what the law of Washington really is with respect to the liability of charitable institutions for negligence.

In order to show what is the attitude of the Supreme Court of Washington, it is thought that quotation of the concurring opinion of Mr. Justice Robinson will be of great value. At page 36 of the opinion Justice Robinson said:

> "I am of the opinion that the trial court was clearly right in concluding that the appellants offered no substantial evidence tending to prove that the respondent hospital was negligent, either in the selection or retention of the nurse. I realize, of course, since the evidence submitted at the first trial was substantially the same as that submitted at the second, that this is equivalent to saying that we erred in holding upon the former appeal that a case was made for the jury as to one or both of those issues. I think we did so err. But however that may be, the trial court was bound to follow our former opinion since it became the law of the case. We are also bound to follow it.
>
> * * * * *
>
> "But even if we were at liberty to disregard the opinion rendered upon the former appeal and open up that matter for reconsideration, I would still be in favor of granting a new trial because I have come to believe that the rule of tort non-liability of so-called charitable institutions has become an anachronism and should be no longer enforced. The only consideration that would cause me to hesitate is that so important a change in our established law ought ordinarily be made by the legislature rather than by the courts. I note, however, that, although this reason was strongly urged by a dissenting justice, it did not deter the Supreme Court of California from recently abandoning the rule in a case decided some months after our opinion on the first appeal was rendered. *Silva* v. *Providence Hospital of Oakland,* 14 *Cal.* 2*d* 762, 97 *P.* 2*d* 798.
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> * * * * *
>
> "It would serve no useful purpose to here set out the reasons why the rule should be abandoned. *I think it appropriate, however, to call the attention of the administrative officers of hospitals and other charitable institutions to the fact that the trend in that direction has become very strong and that it is rapidly increasing in momentum.* As indicative of this, I cite the following: *Sheehan* v. *North Country Community Hospital,* 1937, 273 *N. Y.* 163, 7 *N. E.* 2*d* 28, 109 *A. L. R.* 11 97; 38 *Columbia Law Review* (1938), 1485; *The Silva Case, supra,* decided in January, 1940, and comments on the non-liability rule appearing independent in the May, 1940, issues of three of our law reviews, to-wit: 28 California Law Review, 530; 26 Virginia Law Review, 951; and 1 Washington and Lee Law Review, 257. The next generation of judges will surely abandon the rule if we do not." (Italics ours.)

After the two decisions noted, it will probably take some legislative expression of policy to make clear just what the law is as to the liability of charitable institutions. However confusing these decisions may seem, the second decision is very clear to the point that the Justices of the Supreme Court of Washington have become tired of applying the rule of exemption for hospitals in that state, and will no doubt, in the future, seek to impose liability whenever and wherever that may be possible. The prediction contained in the words of Mr. Justice Robinson is not that of a flamboyant judicial prophet. To the contrary, his prediction is fortified by the decisions of courts in the states of Colorado, Tennessee, California, Minnesota, Alabama, New York, and by the decisions of other states which narrow and restrict the application of the doctrine of exemption. When the justice called the attention of hospital administrators, and administrators of other charities to this plain, rapid change in our law he performed a real service. His opinion serves to clarify the outline of the "handwriting on the wall."

It is decisions such as these which point even more strongly to the necessity, for hospitals particularly, to secure adequate public liability coverage. It has been demonstrated through decisions noted in the pages of this Journal that the law of a state or states, may change over night with an almost paralyzing rapidity. It is therefore of utmost importance that all hospitals be adequately protected by dependable insurance, lest they find themselves in the unhappy position of being forced to pay a tort judgment out of the funds employed by them for the furtherance of their charitable purposes.

Intervening Petition Filed in Suit to Recover Damages for Personal Injuries

Prevost v. *Smith,* 197 *So.* 905 (*La.*).

This was a suit which had been brought by the occupants of one automobile against the driver of another automobile and his insurance com-

pany, to recover damages for personal injuries. After the suit had been begun, the Charity Hospital of Louisiana, at New Orleans, intervened, pursuant to the provisions of an act of the legislature, known as *Act 289* of the Legislature of 1938, and claimed certain sums from three of the plaintiffs for drugs, medicines, and x-rays furnished during their stay at the hospital. The act referred to evidently allows any charity hospital of the state to file an affidavit in support of its intervening petition, setting forth the nature of the services and the reasonable worth of those services. Unless the allegations of the petition and affidavit are overcome by evidence to the contrary, then the petition and affidavit is to stand as true and the court must then enter judgment in favor of the intervening hospital.

In this case the plaintiffs did not offer evidence to the contrary and as a result, the claims of the hospital were held to have been properly allowed.

Whether Hospital and Physicians Are Liable for Alleged Breaking of Plaintiff's Ribs

Guilliams v. *Hollywood Hospital, et al.*, 105 *P.* 2*d* 318.

This was an action against the hospital and certain physicians for the alleged negligence in breaking one of plaintiff's ribs. It appeared that the plaintiff had been admitted to the hospital for the purpose of having performed an operation on his right kidney. It was alleged on his behalf that he was admitted for such an operation and that as a result of negligence of the hospital and of the individual defendants, one of the plaintiff's ribs was broken. It was also alleged that the plaintiff did not know whether the rib was broken before, during, or after the operation, but that it was not broken before he entered the hospital. It was also alleged that the defendants failed to learn of the broken rib, or that if they did learn of that fact, then they did nothing to render treatment for that condition to the plaintiff. The trial court entered a judgment in favor of the defendant hospital after it had filed a demurrer to the complaint.

The case is not entirely satisfactory for the purpose of hospitals since it was decided upon the pleadings rather than on the merits, however, it has value in that it points out that the negligence alleged against the hospital is not sufficient to state a good cause of action.

In its opinion the court said:

> "Finally, it is contended by appellant that in substance that plaintiff's complaint sufficiently charges negligence on the part of respondent hospital by reason of the alleged failure of respondent to discover plaintiff's broken rib. In that connection, it is sufficient to note that respondent, being a corporation, is without authority to practice medicine. That privilege as pointed out by respondent is denied to corporations by *section* 2008 *of the Business and Professional Code, Statute* 1937, *P.* 1255. The discovery of a broken rib and the treatment thereof, after the discovery, would appear to be an act of practicing medicine. It should also be noted that no legal duty devolved upon respondent hospital, in the circumstances, to examine plaintiff from time to time for broken bones."

The plaintiff's complaint, it should be noted, did not purport to charge the hospital with negligence by reason of any alleged negligence on the part of the doctors who were evidently not employed by the hospital. Therefore, as the court pointed out, there would be no duty upon a hospital to search for or treat any of the alleged mistakes of a doctor unless one of the hospital's own physicians discovered a situation which, as a medical man, he would know would require treatment. Such facts were not present in this case. The complaint leaves much to be desired in that it was speculative and failed to charge negligence as it should be charged under the rules of pleading. Plainly, no cause of action could be stated against the hospital with the facts found in the complaint.

George E. Phillips

George E. Phillips, who for the past twenty-six years has been superintendent of Herman Kiefer Hospital, Detroit, Michigan, died recently. Mr. Phillips had been in ill health for more than a year but was active in the administration of the hospital eleven days previous to his death.

Mr. Phillips, a personal member of the American Hospital Association since 1916, was one of the outstanding administrators in the hospital field. During a quarter of a century he developed the Herman Kiefer Hospital as one of the best special institutions in the country.

Puerto Rican Hospitals and Hospitality

MALCOLM T. MacEACHERN, M.D.

UNDER a hot tropical sun, in a beautiful old city fifteen hundred miles from New York and the same distance from Cadiz in Spain, a new page in hospital history was written last month, when San Juan, Puerto Rico, was the scene of the first Inter-American Institute for Hospital Administrators. From the Dominican Republic, Haiti, Cuba, the Virgin Islands, Panama, Venezuela, Colombia, and the United States, came representatives to join the hospital administrators of Puerto Rico in a conclave with a dual purpose—to further the art and science of hospital administration, and to promote understanding and good will between the Americas. In these days when the people of so many nations are hostile toward those of other countries, it is a heartening contrast to watch warm friendships take root and grow as readily as they do on our side of the world. By the time the ninety-three full-time registered students, and as many more part-time enrollees, had reached the closing session at noon on December 12, after nine days of "school," a high degree of cordiality had developed. And after the "informal airing of reactions" during the Spanish Fiesta at the Escambrón Beach Club that night, it was as if there had never been a time when we were not all thoroughly acquainted with one another.

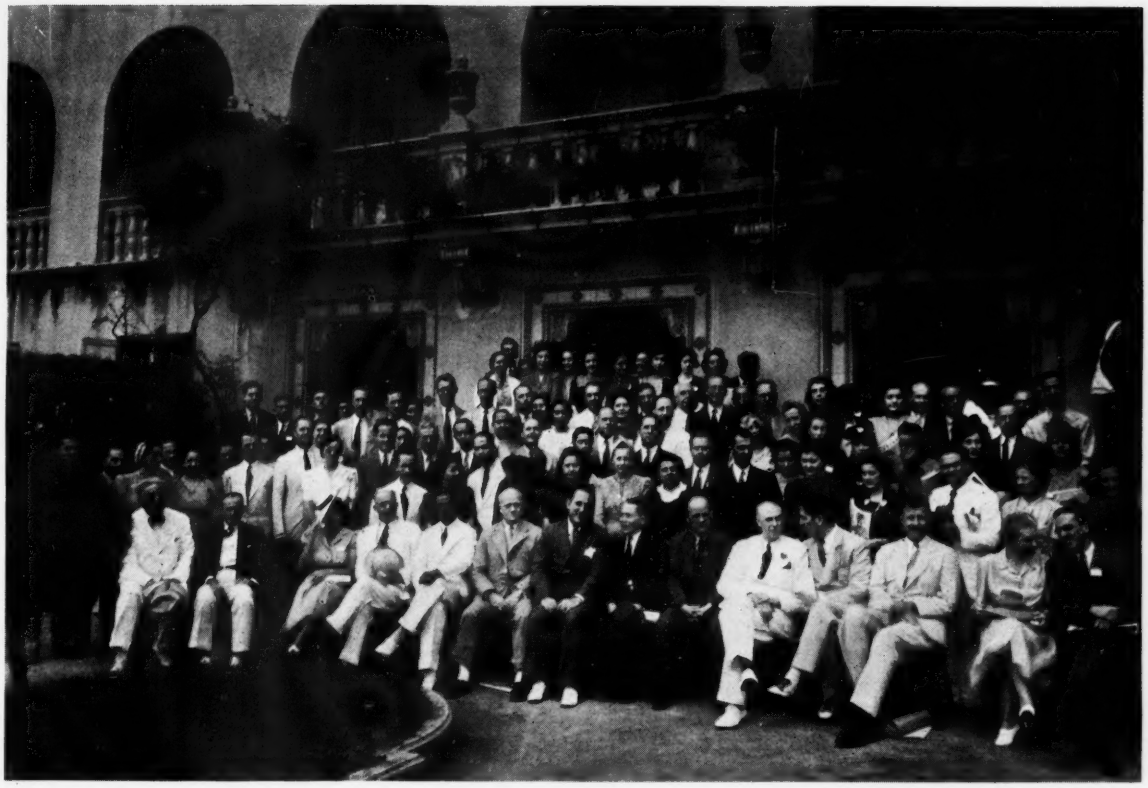
Though the familiar Stars and Stripes waves over Puerto Rico, the atmosphere is Latin American and there is here more that reminiscent of the Americas to the south than to the north. A cultural, social, and scientific bridge between the Americas passes through the Indies, and the medical pillars of this bridge were unquestionably strengthened by the Inter-American Institute.

To come from the ice-bound north to the tropics in December is to experience a queer sensation of being transplanted to a dream world, with the palms and the flowers and the brilliant sunshine seeming an illusion. Then there is that overwhelming spirit of cordiality that the Latin races show, and to be so very warmly received and so lavishly entertained makes one feel still further removed from the cold realm of reality. But when you visit the hospitals, the familiar setting brings you back to earth, and you are surprised to discover that you still have powers of analysis, and can see things to criticise, to commend, and to admire.

Puerto Rico under Commissioner of Health, Doctor Edouard Garrido Morales, is an exhibit of hospital progress. In each of the seven senatorial districts of the island is being built or has lately been completed a 250-bed hospital—sorely needed—to replace outmoded, overcrowded institutions for the care of the indigent. Two of the hospitals are now in operation, two more will be opened within the next six months, and construction on the remaining three will proceed when budget arrangements have been made. Supplementing the district hospitals are over fifty public health centers, charged, in the words of Doctor Morales, with "modern methods for the prevention of disease and the preservation of health to the citizens of their respective communities," and directed by full-time medical officers. In continental United States only ten states have their entire territory covered by public health units under full-time personnel, as is the case in Puerto Rico.

Throughout the island there are many fine smaller hospitals, and the larger municipalities have good hospitals. In San Juan there is a wonderful new Ophthalmological Institute. The 135-bed Presbyterian Hospital in this city is a splendid institution. Additions and improvements have recently been made to the hospital connected with the School of Tropical Medicine in San Juan, so that it is a model modern hospital. It was in the beautiful new auditorium of the School of Tropical Medicine that the main sessions of the Institute were held, and the executive director and hospital administrator of this school and hospital, who is also president of the Puerto Rico Hospital Council, Senor Felix Lamela, was the moving spirit of the Institute for Hospital Administrators.

There is common ground for health planning as part of the unity and preparedness program by all peoples of the western hemisphere. In Puerto Rico last month the American Hospital Association and the American College of Hospital Administrators helped the University of Puerto



The First Inter-American Institute for Hospital Administrators held at the University of Puerto Rico, San Juan

Rico, the Insular Department of Health, the Puerto Rico Medical Association, the School of Tropical Medicine, the Territorial Charities Board of Puerto Rico and the Puerto Rico Hospital Council to enlarge appreciation of the administrative function in hospital operation among the people of the islands, Central and South America. The success of the first Inter-American Institute assures a repetition of the venture, the effects of which should be far-reaching in improvement of hospitals and furtherance of mutually helpful relationships.

Exhibits Showing Progress of Medicine and Hospital Development

The progress of medicine was dramatized in the New York Hospital-Cornell Medical Center, New York City, on December 4 with a series of notable exhibits of the progress of medicine and the development of the hospital dating back to early hospital days in New York.

Among the exhibits were such recent developments as the Lindbergh-Carrel glass heart, the Pavex glass boot, fever therapy and the blood plasma for Britain project.

The interesting exhibit was arranged as a part of the ceremonies of the induction of the newly elected officers of the Society of the New York Hospital: William Harding Jackson, president; Barklie Henry, vice-president; Augustine J. Smith, secretary; and Henry S. Sturgis, treasurer.

Barklie Henry, vice-president, and William Harding Jackson, president

Price Trend of Hospital Commodities

McGill Commodity Service, Inc., Auburndale, Massachusetts

Sponsored by the Committee on Purchasing of the Council on Administrative Practice

BUSINESS activity, which is now at an all-time record high, is facing an unparalleled era of activity. This is not a natural or healthy boom, but is primarily artificial and reflects a national emergency. At this time it is of interest to briefly check up on prospective Government spending for national defense over the next half decade. The total is estimated in the vicinity of $35,000,000,000 which is double the amount already appropriated. The proposed schedule calls for the expenditure of seven and a half billion dollars in 1941, nine billion in 1942, seven and a half in 1943, six billion in 1944, and five billion dollars in 1945. This means that not for four or five years will Government spending again be as low as it is today, and two years hence national defense will be the biggest industry in the United States. At least five hundred million dollars will be spent monthly during the first half of next year, and during the closing six months the monthly expenditure will gradually creep toward the one-billion-dollar mark.

What these figures mean in terms of production, consumption, employment, purchasing power, etc., is extremely difficult to visualize. However, it does not require a stretch of the imagination to assume that this colossal foundation under the business structure will support a prolonged era of outstanding activity which will be modified only to a limited degree in the event of world peace before the end of 1941. Never in the history of the world have so many provocative uncertainties existed, yet when every phase that directly or indirectly affects the business situation is carefully analyzed and weighed, it is quite apparent that the outlook is anything but bearish as regards the months directly ahead.

Within a short time the world war will be a year and a half old, yet during the entire period price fluctuations have held within narrow boundaries. This is nothing new because in the case of World War I prices did not begin to show signs of outstanding strength until the war was a year and a half along. Right here we wish to emphasize the point that the wild gyrations in commodity markets noted from 1916 through 1920 will not be repeated during this war era. Control systems, both actual and prospective, are ready to cope with any emergency. Furthermore, there is an ample supply of almost every major strategic commodity, and in the background an adequate producing capacity exists. Equally important, the war to date has not interfered with the shipment of commodities of foreign origin to this country in volume. In fact, huge reserves are in the process of being built up.

Generally speaking, we endorse a program of protecting inventories on a reasonable basis, particularly the low-priced commodities. This is basically sound because under the stress of a munitions boom there can hardly be other than a definite increase in producing costs. This prospect is not due exclusively to higher raw materials, but considerable pressure for wage increases is already in evidence, and production efficiency is not quite so pronounced as was the case a few months ago.

Keeping in mind the huge Government expenditures yet to be liquidated, it is indeed likely that supply-to-demand ratios will strengthen even though production schedules are stepped up to maximum levels. We are fully cognizant of the fear of Government control and price fixing, but we repeat that no action will be taken until commodity markets reach substantially higher levels than those which prevail today. We wish to make clear another point, namely, that ultra-conservatism in anticipation of peace terms in 1941 should not be overemphasized for the reason that, fundamentally and comparatively, price levels today are still in a valley and not on a peak. Therefore, abrupt peace would not necessarily mean a severe collapse in commodity markets.

All Commodities

As the year ends, the level of commodity prices stands 3 per cent over that of a year ago, 15 per cent below the peak chronicled in 1937, and 26 per cent under the base year 1926. It is of interest to note that since the summer period, the

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underlying trend has moved steadily upward with practically no interruption. There is hardly any question, in view of the abnormal conditions which are so apparent, that commodity prices are destined to reach new high ground as 1941 progresses.

Drugs and Chemicals

Only two important changes were noted in the Index during the month: First, a price mark-up in alcohol which was more than offset by a further weakening in the price trend of quicksilver. Production of mercury in both September and October was at the rate of 3,600 flasks, more than twice as great as the comparable months of 1939. Stocks both in producers' and consumers' hands have advanced steadily in the past month, and with the supply-to-demand ratio weakening, the price trend has responded. Further weakness could easily materialize.

Paper Products

Price stability has prevailed in recent weeks. Production has declined and is currently holding in close alignment with consumption. In view of the favorable outlook for industrial activity, employment, and purchasing power for 1941, the time is not far distant when the paper industry will work into a considerably stronger position. At the moment markets are reflecting overproduction that occurred earlier in the year and the inevitable let-down following the shortage scare that prevailed in the pulp market only a few months ago. There is no indication of any important price change in paper quotations during the near term.

Cotton Goods

The 1940 cotton crop was officially estimated at 12,686,000 bales on December 1. Domestic consumption is destined to reach the highest volume on record, but exports so far have been only one-fifth of the volume a year earlier and the lowest in sixty-three years of record. In spite of the greater domestic consumption this year the total disappearance of American cotton will be less than the current crop and the carryover at the end of the present season is facing another increase. Meanwhile, a great stimulation in the demand for cotton goods as a result of the defense program, has been instrumental in forcing the composite price average for finished goods to a new high. Per capita consumption will be well maintained, reflecting the highest level of employment and purchasing power in more than a decade. However, it is well to bear in mind that the magnitude of the price increase in finished goods temporarily at least discounts bullish forces.

Fuels

No price changes of importance were chronicled during the month. As regards bituminous, there are some outstanding problems that create uncertainty: For example, the supply of coal held by industrial consumers is now about 20 per cent more than was the case a year ago. Then too, there is considerable agitation by producers to have lower minimum prices assigned to them so that they may compete with more favorable price set-ups. However, there is nothing in the present situation that points to the abolishment of the minimum price set-up, and the present mine wage scale agreement expires on April 1, 1941. It is strongly advisable to maintain a protective purchasing policy. Fuel oil prices will be subject to some strength along seasonal lines. The statistical position is by no means critically unbalanced. Colder weather and an increasing rate of industrial activity, and a higher level of tanker rates have all contributed to the recent improvement in the statistical position.

Groceries

The underlying price trend moved upward dur-

McGILL MONTHLY PRICE INDEX FOR *HOSPITALS*
1926 = 100

	Dec. 1932	*Dec.* 1933	*Dec.* 1934	*Dec.* 1935	*Dec.* 1936	*Dec.* 1937	*Dec.* 1938	*Dec.* 1939	*Jan.* 1940	*Nov.* 1940	*Dec.* 1940
ALL COMMODITIES	48.0	59.7	68.0	74.3	81.2	73.2	68.4	72.3	73.5	73.1	74.2
Drugs and Chemicals	70.9	75.5	73.6	71.8	70.4	69.9	69.9	77.1	78.0	78.8	78.2
Paper Products	70.9	77.0	84.7	79.2	81.0	102.0	90.5	89.3	89.6	97.1	97.1
Cotton Goods	44.6	80.5	86.8	90.6	91.4	69.4	71.9	85.4	85.9	84.1	87.8
Surgical Dressings	70.4	82.8	82.8	79.5	81.2	70.4	68.8	73.4	73.4	74.3	74.3
Fuels	51.7	75.8	74.3	67.8	78.5	89.9	81.3	95.8	98.3	93.0	93.0
Groceries	41.2	50.6	69.6	72.3	84.7	59.0	54.1	57.6	59.2	50.3	50.8
Meats	53.8	45.0	63.1	91.6	79.1	87.5	79.0	68.5	71.2	87.2	86.2
Fresh Fruits	73.8	82.6	78.2	80.1	63.6	56.1	58.6	53.7	62.0	57.3	61.2
Canned Vegetables	74.8	96.0	92.4	85.2	83.0	77.3	62.5	66.8	66.8	64.4	64.4
Canned Fruits	61.9	70.2	80.0	74.2	75.1	80.8	67.2	66.6	67.6	64.7	64.7
Dairy Products	67.1	59.9	71.2	78.6	81.4	80.1	71.5	68.1	68.2	76.1	83.0

Happiness is not relative—

You either are happy or unhappy in your present position. No one but you can know which. If you *are* happy, you are where you belong; if you are unhappy, don't waste another day — do something about it. You owe it to yourself to make the most of the career you have chosen. Happiness can only be achieved through success in that career. To gain success you must know that you are on the "right road".

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ing the month. A check-up reveals price strength in cocoa, coffee, corn oil, sugar and rice which more than offset price weakness in beans and lard. While there is a great abundance of all types of foodstuffs, yet it is well to keep in mind that for a prolonged period prices have held at deflated levels which have discounted the unbalanced supply-to-demand ratio as well as the element of keen competition. There is no basis for anticipating any radical price changes, but at the same time the underlying trend will unquestionably move moderately upward as 1941 progresses.

Meats

Only moderate price fluctuations occurred in livestock quotations. A check-up reveals that pork prices in December were lower than in November, and the same was true of fresh lamb. However, beef prices moved moderately upward. The price level of cattle is destined to remain on a high plane throughout the year 1941 with the average somewhat higher than in 1940. There are plenty of cattle on the farms, in fact the production cycle is gaining ground a bit too rapidly to be economically healthy. However, actual slaughter will be more or less restricted and the underlying trend of producing costs is moving slowly yet steadily upward. In the case of hogs, two forces will work against important price weakness: First, the inevitable contraction in the number on the farms at the start of the new year, and second, higher feed costs. Moreover, increasing consumer purchasing power which will reach a new peak next year will tend to offset the severe contraction in export trade.

Dairy Products

This group continued to record the greatest activity and advanced sharply during the past month. The price increase since July in butter measures 38 per cent, yet bullish forces still hold the spotlight. Latest data show that cold storage holdings now stand sharply under the average of the past half decade. Diminishing output along seasonal lines in the face of broadening employment and purchasing power tends to support a continuation of a strong price undertone. Cold storage holdings of cheese are adequate, but prices are showing a definite disposition to strengthen which is largely a seasonal characteristic, but at the same time is substantiated by higher producing costs and expanding demand. The outlook favors a high egg market throughout the winter period. The point is that unfavorable feeding ratios reduced flocks during the spring and summer, and the time factor is naturally important in correcting the situation.

Miscellaneous

Potato prices have moved into a more attractive buying zone. There is no room for important price weakness from current levels which fully discount adverse elements. A marketing agreement has been approved and cooperative measures could easily result in definite price strength, particularly after the turn of the year. No important changes have been noted in the price list of canned fruits and vegetables. Prices for fresh fruits have also held on a stable basis.

In summary, in view of the tidal wave of business expansion, it is advisable to row with and not against the tide. Purchasing agents should be on the alert with the idea of capitalizing any near-term price concessions in the long list of industrial commodities. Maintain protective reserves for 1941 account.

Warning to Hospitals

It is reported that the American Cellulose Company of Indianapolis is resuming operation under the leadership of one L. R. Serinsky and is circularizing hospitals for the purpose of purchasing used x-ray films. This concern in its previous operations with hospitals conducted its business in such a manner as to become involved with the Post Office authorities and the courts, and several hospitals were unable to recover the used films that were shipped to it. *HOSPITALS* has advised its readers in a warning, under date of July, 1939, relative to the unsatisfactory manner in which this concern was conducting its business. This warning is repeated for the benefit of the hospital field.

Instruments and Surgical Supplies

The preliminary returns for 1939 from the Census of Manufacturers inform us that $7,160,692 (value at factory) worth of instruments and parts were produced in the United States last year; $17,886,322 worth of x-ray, therapeutic equipment and electronic tubes; and $71,679,980 worth of surgical supplies and equipment and orthopedic appliances were produced; a total exceeding one hundred million dollars at factory values. It is probable that over one-half of these supplies were purchased by hospitals.

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Organization of Civic and Service Clubs for Plasma Banks

ANTHONY W. ECKERT

ONE of our hospital projects at Fitkin Memorial Hospital, which has received state-wide publicity, is our plasma bank and blood donor service.

In a large institution the blood bank has proven successful because the demand for blood is so great, the blood does not remain in storage sufficiently long to result in an appreciable loss from deterioration. In small communities, the plasma bank and blood donor service for transfusions are more practical. If properly organized, a good supply of plasma can be stored and kept for months without spoiling and a good system can be established to always keep the bank well supplied.

At Fitkin Memorial Hospital, located at Neptune, New Jersey, we have accommodations for 190 patients. We usually run at an 89 per cent capacity and serve twenty-five municipalities. Not being a large enough institution for a blood bank, but having experienced the handicap of delay in finding a blood donor when needed, we presented to our local Lions Club the urgent need for a plasma bank and donor service. The response to our needs was all that could be desired. We have enrolled over seventy-five men who have presented themselves for examination. They have been examined and typed and record cards have been kept with all necessary information.

Community Cooperation

This outstanding public service can be started in any community by a hospital administrator who has close association with civic or service clubs, namely, the Rotary, Lions, Kiwanis, Exchange and other active associations in the community. Obviously enough, the membership of these clubs represents the outstanding business men of the community. One could also interest the Masonic Orders, Knights of Columbus, American Legion, Veterans of Foreign Wars and sportsmen's clubs. These men come from all walks of life and are of every race and creed. They have a common desire to be of service or do some outstanding good for their fellow citizens and they appreciate an opportunity when it is presented. These men may be interested in the activities of the hospital but they need to be shown how they can assist in increasing and bettering the service.

The Author

● **Anthony W. Eckert is Superintendent of the Fitkin Memorial Hospital, Neptune, New Jersey.**

Blood Donor Registry

The blood donor registry, as proposed by Dr. C. A. Pons, our chief pathologist, and the faster methods of cross-typing and a rapid flocculation test for syphilis, have reduced the difficulty and waiting time in the orderly transfusion.

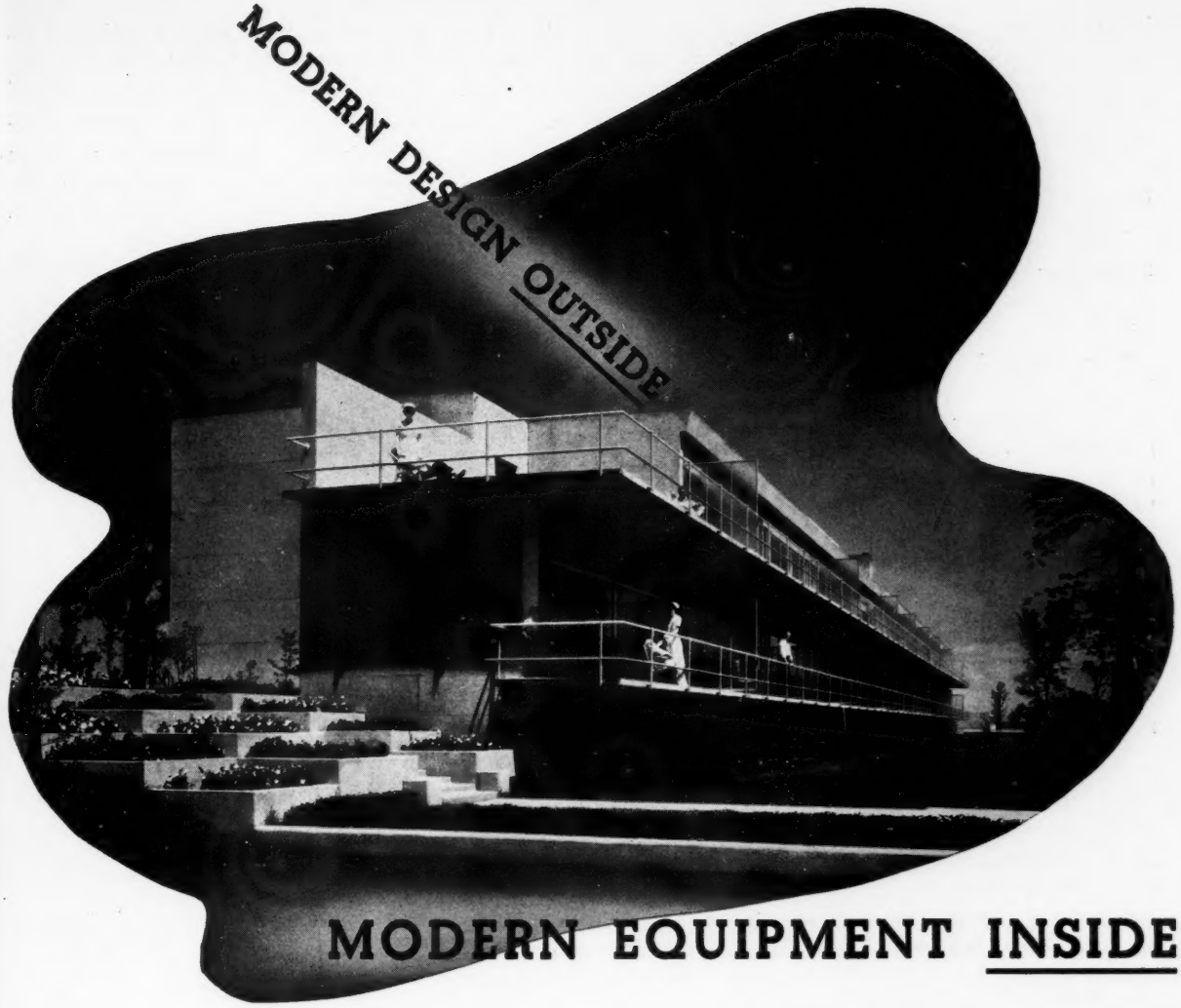
However, there are times when blood, or an adequate substitute, is needed in a hurry. Of all the substitutes, acacia included, none compares with plasma. Even in severe hemorrhage, plasma will allow time to get donors and the orderly transfusion. Plasma has been found superior to blood in shock, since shock is a major complicating factor in severe hemorrhage. The use of plasma in hemorrhage appears to be paramount particularly when supplemented by O_2 administration, as relatively few corpuscles are required to carry on the O_2 transportation to the tissues.

Plasma is the treatment of choice for burns and loss of proteins from other sources such as in kidney disease. With the use of plasma in treatment of shock, there is no delay and it can be given immediately to combat shock or even prevent it. The lack of immediate blood availability has been responsible for deaths from shock in the past. Even with blood available in blood banks there is a delay for cross-typing. With plasma there is no delay. In hospitals without blood banks it may take hours before the transfusion is given.

Plasma can be transported and is not affected by shaking and can be preserved for months in a variety of ways. It can be dried and redissolved. It is always ready for immediate use without preliminary preparations, such as typing and cross-typing.

Method of Collecting Blood

We collect blood in vacuum flasks, containing citrate solution. A Wassermann is taken before the donor is bled. The blood is transferred in the laboratory to 250 cc bottles, centrifuged, al-



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lowed to stand overnight, and then the plasma is transferred to vacuum flasks containing 250 cc saline, using a valve to puncture the vacuum saline bottles, the same valve being used in bleeding the donor. Sterility tests are taken. Sometimes a preservative is added, tincture of merthiolate, although this is not essential.

We do not use plasma of the same type as the recipient, and have encountered no reactions.

Volunteer Donors

Our plasma bank works like a well-organized business. Our capital was started by the donation of blood from a group of volunteers from the service clubs. It is our intention to have civic groups in our communities maintain the capital or plasma supply of our bank. We think of this plasma bank as a community asset. The civic groups sponsor this plasma bank and blood donor service with the thought that it is available for the community at large; for both the indigent and private patients. It is self supporting, as when the plasma is used it is replaced by a member of the patient's family or a friend. The replacement is made by an equivalent amount of blood. This bank is an altruistic one and charges no interest. The expense of the bank is borne by the hospital. However, it must be stressed that all plasma must be replaced by the patient's family.

After the bank is well established with an ample supply, the volunteer donors will be called only when there is a loss or a bad investment. That is, if a recipient, without relatives or friends, is unable to replace the blood used, it must be taken care of by a volunteer donor. When blood is lost through contamination or through a laboratory accident, such as the breaking of a bottle, it must also be replaced by one of our volunteers. These bad investments must be replaced through our blood registry.

The plasma bank is a public safety measure, ready to serve all alike—rich or poor. Every effort will be made to keep it self-supporting and use our list of public-spirited community volunteers only when necessary, as the second line of defense to maintain our capital.

Our project has been very successful, due primarily to altruistic-minded persons who volunteered with the thought that they were of service to humanity.

War and Surgical Instruments

For one to get the present picture in the procurement of surgical instruments, it is interesting to note that if all the manufacturers of surgical instruments in this country were to start working on a twenty-four-hour basis, it would take two full years for them to complete enough instruments to fill the orders now placed by our Government and others. And, strangely enough, this would only cover standard instruments; not the peculiar specialties and variations of standard instruments. One might ask why this is true.

First, we have few artisans in this country who are skilled enough in the making of surgical instruments to be given the responsibility of making any particular instrument. For many years there has been a real shortage in this country of the type of craftsmen needed in the manufacture of surgical instruments. This is unfortunate since our own need is acute plus the fact that most of the world is now looking to us to provide them with surgical instruments.

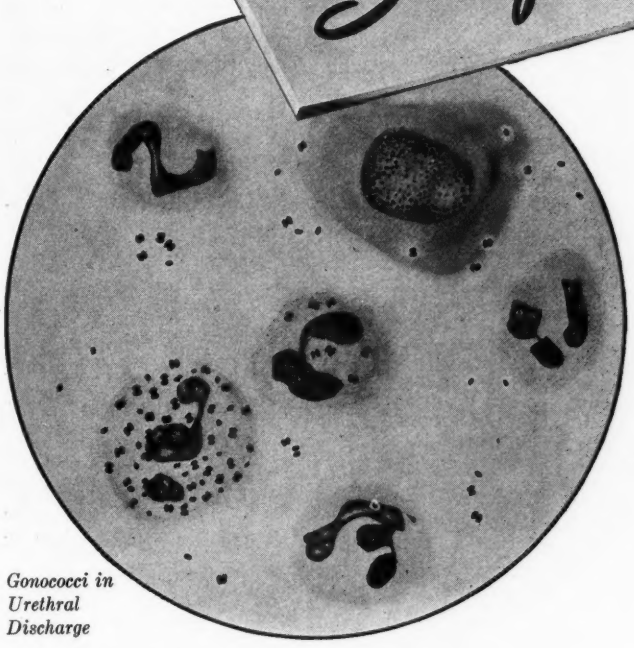
Second, we never have produced many surgical instruments (practically none before the First World War) chiefly because the manufacture of surgical instruments is not a production item. It is not enough that only a few instruments per day can be made, we must produce on a mass production basis before instrument manufacturing becomes attractive to our investors. Further difficulties will, of necessity, be encountered since we must always remember that a surgical instrument must be considered to be an extension of the surgeon's hand. It must, therefore, be built with precision and accurate balance and whether or not this can be done on the mass production basis is still to be determined.

However, American production has been greatly stepped up and satisfactory instruments, in many cases, are being manufactured. We still lack dies for the delicate eye instruments and some other specialties. In the endoscopic instruments, in some respects we surpass the German products. Since the whole matter of obtaining surgical instruments is in a constant state of flux, it is well to remember that many items wanted by our doctors are difficult, if not impossible, to buy at any price. In some instances prices have risen as high as 100 per cent to 125 per cent.

We must not fail to realize that the agents of our defense program may, at any time, commandeer the largest share of our domestic output of surgical instruments, as well as a large part of the total stock on the shelves of all dealers. For this reason, it is of the greatest importance that all hospitals guard well their stock of surgical instruments and make a definite attempt to control the use of them.

P. L. Burroughs, Rochester General Hospital.

Sulfapyridine



Gonococci in Urethral Discharge

A significant contribution to the treatment of GONOCOCCIC INFECTIONS

The introduction of sulfanilamide in the treatment of gonorrhea admittedly represented a notable therapeutic advance. More recently, however, clinical studies have indicated that sulfapyridine may be even more effective than sulfanilamide in the treatment of this condition.

The great majority of patients with gonococcic urethritis treated with sulfapyridine experience a rapid subsidence of clinical signs and symptoms. Within a few days after the institution of sulfapyridine therapy, smears and cultures become negative for gonococci, the urine becomes clear, and urethral discharge ceases. Several cases which had failed to respond to sulfanilamide have later been treated successfully with sulfapyridine.

Thus it appears that in sulfapyridine the physician commands a potent therapeutic weapon for combating this widespread and distressing disease.

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Buying and Preparation of Food

MARJORIE McKINLAY

THE percentage of the hospital dollar to be spent for food is not so much a dietary problem as it is a problem for the hospital administrator. The many factors to be considered depend upon the type of service, hospital collections, social strata of the patients, etc. There is a regretably too frequent recourse to cutting the food expenses every time an economical adjustment is to be made. To cut to the extent of forcing the dietitian to use inferior quality, to be too limited in variety, to lack the proper ratio of the different types of food—this is to cut below what should be the minimum. To reduce waste, to eliminate fancy foods, to serve plainer fare—these are legitimate economies.

The distribution of the money for different classes of food is entirely up to the dietitian if she does her own menu making and buying. In "Food Service in Institutions" by West and Wood of the Institutional Management Department of Kansas State College, both the figures published by the United States Department of Agriculture and those of residence halls of moderate income are given. The figures used by the residence halls studied are: fruits and vegetables 25 per cent; fat, sugar, and miscellaneous 15 per cent; eggs, cheese, and meat 30 per cent; cereals 10 per cent; and milk 20 per cent. The United States Department of Agriculture gives the following distribution: milk and cheese 30-35 per cent; fruits and vegetables 25 per cent; meat, fish and eggs 15 per cent; cereals 15 per cent; fat, sugar, and miscellaneous 15-20 per cent. Palatability in such a diet as the latter becomes a matter of grave concern due to the high cereal content.

The Food Buyer

The dietitian should either do the buying of the food or have the privilege of specifying grades, sizes, etc. The very first qualification of the dietitian in this capacity is that she knows food thoroughly to be able to intelligently specify what she needs and to recognize it as being up to specifications or not when she receives or uses it.

Food should be bought on a competitive basis and quality, size, etc., stipulated clearly at the time quotations are requested. I wish at this time to put in my own plea for Government grading, especially of meat; and for Government inspection of poultry.

When food is ordered it should be with a definite idea in mind of its use. For example, potatoes for baking or steaming; ham for broiling or for spaghetti sauce.

The edible portions of food should be figured to ascertain the cost per serving. For example, the difference in the figure on the cost of a pound of cauliflower and a pound of frozen peas appear far greater than is the cost per edible portion of these items.

The perpetual inventory is the most efficient system for keeping records of the amounts used over a given time; the trend in prices on any item or the amount on hand at any time.

Several sizes of tins of the same food should be kept on hand. In the long run the exclusive use of the largest size may not be the most economical.

In buying food the public health factor must be borne in mind. Food should be purchased carefully from establishments known to offer good quality merchandise and to have clean quarters. Such establishments should control rodents and insects, especially cockroaches and flies. Those who handle and prepare food should be careful of their personal cleanliness. All cooking should be

The Author

● Marjorie McKinlay is Chief of Nutrition Service at the Corwin Hospital, Pueblo, Colorado.

Presented at the joint meeting of Colorado Hospital and Colorado State Dietetic Associations, Denver, 1940.

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Food Preparation

The objective of the dietitian in planning, preparing, and serving meals to her patients and personnel is to serve meals that both in sickness and health meet but not exceed the person's caloric needs and which are designed to provide, as far as possible, in liberal excess of today's calculated requirements, all nutritive essentials, notably minerals and vitamins. The difficulties are obvious. To construct such a diet while shunning the danger of obsity and avoiding the irritating effects of too much roughage is not easy; but with an intimate knowledge of food values and with attention to detail it can be done.

In his excellent paper on "The Diet of Psyche" Dr. MacFie Campbell, of the Boston Psychiatric Hospital, told the dietitians at their annual meeting in 1936:

> "A dietitian with a keen interest in the human personality, with realization of its needs, will be all the more efficient in her task. She will make a contribution to the outlook of physician, nurse and patient. She will live a fuller life. She will find herself amply repaid for taking some interest in the diet of Psyche."

To endeavor vigilantly to improve food served, the dietitian must keep abreast of the published research work in effective food preparation and service and compare new procedures with her present methods.

A close observation and study of food intakes of various groups of patients and personnel will bring satisfaction to the ones who eat, and the waste will be cut. The value of high standards in food preparation cannot be over-emphasized.

On the subject of actual food preparation palatability is the first consideration. We want the food to taste the very best it is possible to make the particular dish in which we are interested at the time. Every one has definite ideas on food whether or not they are with scientific foundation; and we want to make the food to please the taste of as many of our group at one time as is humanly possible.

It is better to use a good quality of a plain food rather than an inferior grade of a choicer food. In preparing an appetizing meal if one part of it, for example the meat, is an expensive cut use an economical dessert. The institutions are tending to get away from the former criticism of "Feast on Sunday, Famine on Monday." If I wish to give a special treat on Sunday I have found it better psychology to give the less expensive on Saturday and make a point of not having a great let-down on Monday.

Prepare foods calling for different parts of the equipment at one time so as to save confusion about oven space, mixers, etc. Prepare dishes in the same meal to give an equal distribution of labor in the division of the dietary department.

Checking the garbage with interest in returned food and ascertaining the "why" it was returned will add greatly to subsequent preparation of these foods—or their discontinuance. Carefully figure the amount to be ordered to eliminate as much as possible the "left over" problem.

Preparing seasonal dishes is an important factor. We have all had the unpleasant experience of serving or having served to us a meal planned for hot, or cold weather, and then having the temperature change too suddenly to completely change the menu.

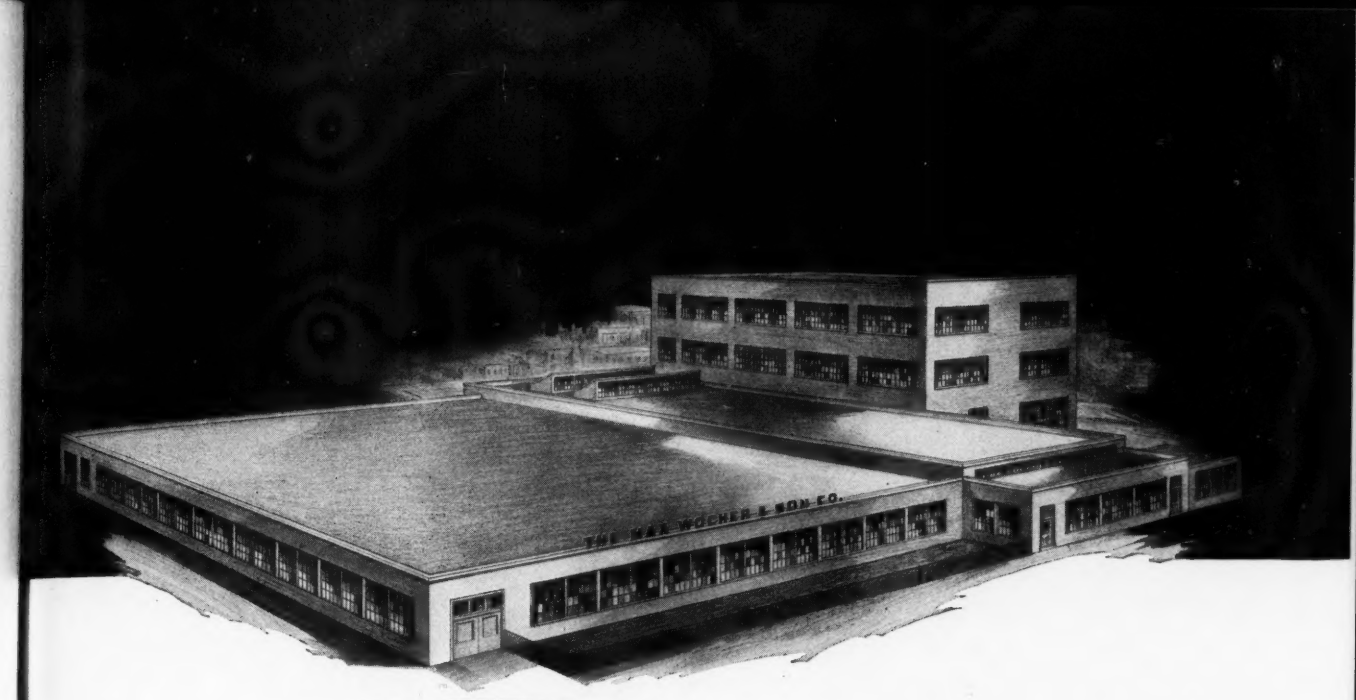
In preparing food with the least waste of time, foods, and effort the buying is an interrelated factor. The labor time expended on very small apples, for instance, might make it far more efficient to pay twenty-five cents a bushel more for a size and quality that could be more efficiently prepared.

The differences in old time cook books and those of today make us appreciate the great importance of standardization of recipes. The dietitian must be more critical of her own recipes for full flavor, correct cooking or baking time, temperature, amounts, and the number of servings should include the size of portion. We noted a short time ago the importance of differences in intakes among various groups. I never have our recipes typed onto the permanent cards until we have made the dish several times and are satisfied with it in every way.

The eye appeal of food is very important. If a dish with a very fine flavor has a drab appearance the other accompaniments should purposely be appealing to offset it. I have in mind two dishes that are prime favorites with our group because they have tasted them before and like them; but were I operating a commercial cafeteria I would hesitate to serve them because the eye appeal would not be an inducement. Variety and the surprise element is a great help in having the patients or personnel look forward to the meal period. I think and sincerely hope that gone with such old ideas as a bath only on Saturday night, is the repetition of foods the same day every week.

Educational Role of the Dietitian

There are foods that are popular with the majority of people and their dislike is the fault of



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the individual and not the food director. Of other foods this is not the case. In different groups and in different localities these two lists are not identical. Therefore by careful checking that we have mentioned before, and a conscientious effort on the part of the dietitian it need not be necessary to serve unpopular things. Where it is a case of about half liking or disliking the same dish a happy solution is to always present a choice of another food when this is served. I am sure all the dietitians agree that it would be impossible to prepare only the things that every one with no exception likes. Education in nutrition and the improvement in advertising literature and magazine articles are making individuals more food conscious and the attitude toward balanced meals and variety is improving. In this educational side the dietitian has her part.

It is essential that the dietitian have enthusiasm for her work, high standards of achievement, a keen esthetic sense and a good normal, healthy appetite herself. She should visit other commercial and hospital institutions looking for new ideas and means of evaluating her own. Criticisms should be considered valuable aids in overcoming the many obstacles the dietitian will meet in trying to achieve her objectives. If she received them graciously and with good humor in the beginning—and acts upon them—she will be well repaid in the pleasure of knowing that her service is appreciated and enjoyed by the patients and the personnel, and that is the most important of the criteria by which her work is judged.

A Simple and Inexpensive Radiopaque Marker for Laparotomy Sponges

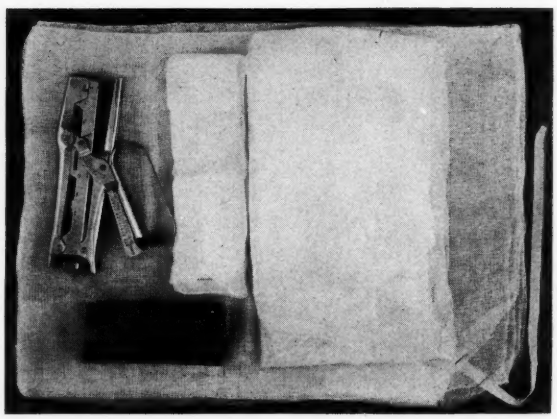
Editor's Note: *The Supreme Court decisions, in an increasing number of states, are holding hospitals and surgeons to a strict accountability for negligence resulting in injury to patients.*

A recent decision in the California Courts instructed that it was the responsibility of both the hospital and the surgeon to count the sponges, and verify the count at each operation at which they were used.

The Massachusetts General Hospital, Boston, for several years has used the following prescribed procedure in counting gauze sponges and pads used in surgical operations:

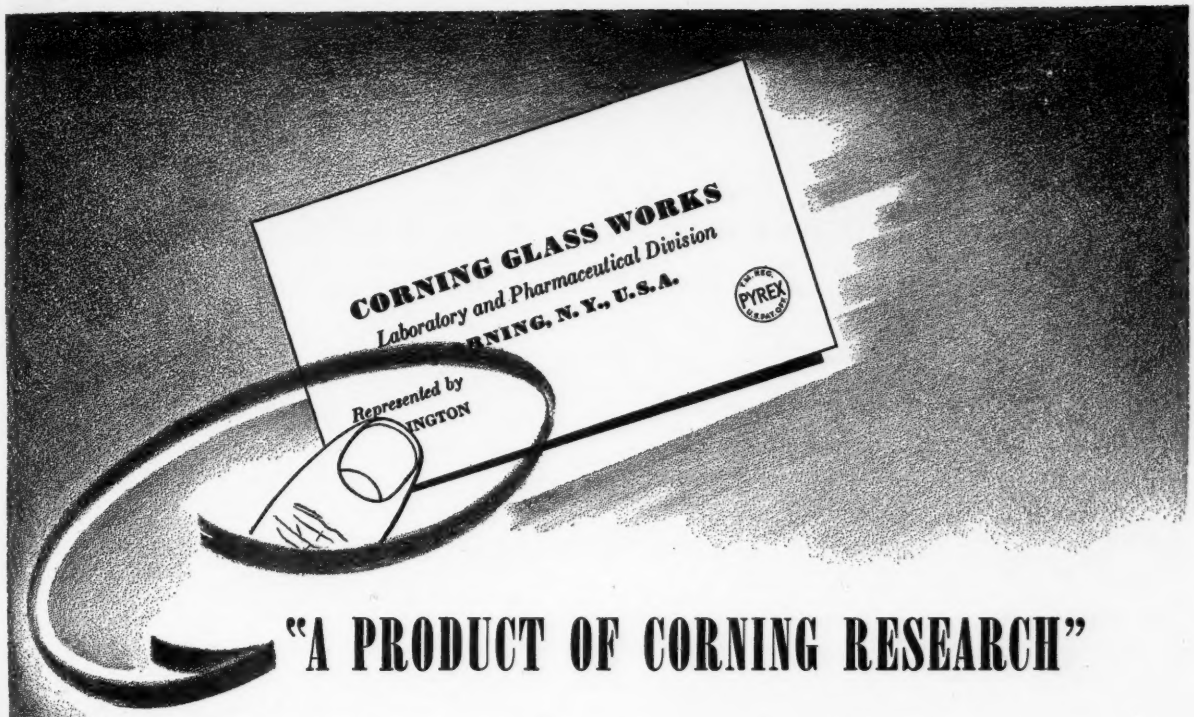
The practice of counting the gauze sponges and pads used during a surgical operation and checking them before closing the wound is a helpful, time-honored safeguard, which has, incidentally, considerable pedagogic value in the operating suite. Occasionally, however, toward the end of an operation the "sponge count" is reported as not checking, and despite as much search of the operative field as the condition of the patient warrants the error cannot be corrected. In such unusual instances it is important to be able to say beyond doubt that the missing gauze has not been left within the wound.

For five years an economical and entirely satisfactory device has been used in this connection at the Massachusetts General Hospital. Just after being folded each sponge or pad has a metal staple clipped to its margin with an ordinary paper clipper. In the case of the "laparotomy pad" a piece of tape is clipped to a corner, which obviates the need for sewing the tape in place. In opening a sterile package of sponges or pads at the operating table the suture nurse verifies the presence of the staple while recording the count. Ace Clipper Plier number 702, made by the Ace Fastener Corporation, of 3415 N. Ashland Avenue, Chicago, has proved satisfactory for this purpose. Clipping three hundred small sponges, made from a bolt of gauze, requires less than fifteen minutes. The cost is negligible, and the presence of the metal staple in no way interferes when the gauze is reclaimed for other purposes. The staple does not come off in use, has no sharp point to catch on tissues, and shows plainly in an x-ray picture, even through an obese abdomen. By x-raying the region operated upon during convalescence the surgeon can positively exclude the presence of an overlooked sponge.



A simple and inexpensive radiopaque marker for laparotomy sponges

John D. Stewart, M.D.
Surgical Services of the Massachusetts General Hospital, Boston



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Special Problems in Separation of Nursing Education and Nursing Service Costs

CHARLES A. ROVETTA, M.B.A.

THE amount of time devoted to the discussion of nursing administration is a tribute to that group and evidence of the close cooperation between two respected professions dedicated to the task of relieving suffering.

An analysis of special problems in separation of nursing education and nursing costs indicates that there are two problems involved. One problem is the separation of nursing service and education costs from all other costs of the hospital; the other involves the separation of nursing service costs from nursing education costs, since the two are jointly associated.

The method of cost analysis which was prescribed by the Joint Cost Committee offers a solution to these and many other issues. This method has the advantages of accuracy, relative simplicity, and workability. However, no benefit is achieved from a mere statement of advantages. To be useful, a cost system must be put into operation. In initiating such a system it is desirable that those persons interested have a knowledge of the difficulties which may be encountered. For this reason the balance of this discussion will deal with those problems of which the administrator should be aware.

Definitions

At the outset certain definitions should be made clear:

Expenditures are payments made, or obligations incurred to make future payments. Expenditures are the means of acquiring usable services and goods. A tank of oxygen is purchased. It may be paid for in cash, but more frequently it is purchased on credit. The fact is that this is an expenditure.

Disbursements are cash payments. These disbursements may be made for goods recently acquired, or for goods and services received some time in the past.

Expenses are that portion of value of goods or services that have been consumed in the rendering of hospital or nursing services during a particular accounting period. These expenses fall into two groups: (a) those which vary appreciably with service rendered during a given period; and (b) those which do not vary substantially with the amount of service rendered.

Cost is the sum of all expenses allocated to a particular unit, such as a meal, a pound of steam, or an hour of nursing service. Cost then is the result of identifying expenses with a particular item, activity, or function. Some of those items are easily identified with their proper activity or function; other expenses must be allocated on a predetermined basis. Thus, heating expense may be allocated to various departments on the basis of either cubic feet, or square feet of floor space if meters are not in use. Since different processes and items of allocation are possible, it is evident that one may compute different kinds of costs. Before using a certain procedure, one must know the conditions under which costs are to be used. Thus it is apparent that the purpose determines the cost concept, which in turn determines the procedure.

Two types of costs are of particular value in a study of nursing service and nursing education. These are average cost and avoidable cost. Average cost is the total expense of an activity divided by the units of service produced. Such a cost assumes that an equal amount of expense is incurred for each of the similar lots of units. In

The Author

● Charles A. Rovetta is Assistant Professor of Accounting, School of Business, University of Chicago.

Presented at (Hospital Standardization Conference) of the Clinical Congress, American College of Surgeons, Chicago, October, 1940.

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the past, nursing cost studies have used this technique almost exclusively.

Avoidable cost is that cost which is added as a result of producing an additional lot of service, assuming that the previous lot would have been produced. As related to nursing education, avoidable costs are those which are added as a result of carrying on nursing education activities. From the point of view of a hospital and nursing administrator, the most significant data can be developed by costs based on the avoidable concept.

It will facilitate the discussion if we show what place the problem of separating nursing costs occupies in relation to the entire field of cost analysis. As I see it, problems of determining costs for a hospital institution fall into four main classifications. An error in any one group or field will lead to erroneous results of costs in all fields. Therefore it is essential that all problems be considered.

First Problem

The first problem is to determine correctly the dollar value of all services and goods acquired. In hospitals, goods are acquired through expenditure and gifts. After goods and services are acquired, they may be retained or consumed, in which case the values become expenses.

Second Problem

The second problem is to determine accurately the amount actually consumed during the period. If the administrator could wait until the end of the institution's operations, the task would be relatively simple. The total value acquired, less those not consumed, would be the total expense of the service rendered. However, the administrator can not wait a hundred years or so. He must establish a criterion of current expense. In hospitals, expense has been incorrectly associated with expenditures. Properly, expense is associated with the utilization of values of service, building, equipment and supplies for the rendering of service; not with the acquisition of these values. The reason for using expenditures as a criterion is the simplicity which this basis affords. It is easy to determine the month in which an expenditure is made; it is more difficult to determine when the value thus acquired was actually utilized. Further complicating the problem in this field are changing price levels, differences of opinion as to whether or not expense is to be associated with assets which have been donated, and differences of opinion as to the rate of depreciation.

Third Problem

With the expense for each month correctly measured, the third problem becomes that of allocating this expense to the proper functions or activities performed during the month. In assigning or reclassifying the expenses, the objective is to make available a cost unit. This unit may be either the hospital as a whole, or any department; it may be an hour of nursing, a pound of laundry, or an x-ray picture. However, the specific cost units here desired are nursing service and nursing education, and it is this problem which I propose to discuss.

All expenses pertaining to nursing can be classified around these cost centers:

1 Expenses which pertain specifically, directly, and only to nursing service

2 Expenses which pertain specifically, directly, and only to nursing education

3 Expenses which pertain directly to both nursing service and nursing education

4 Expenses which are indirectly involved and which must be apportioned to nursing service and nursing education on some arbitrarily selected basis—Examples of these are meals, laundry, residence, etc.

It is to be noted that four groups of items have been set forth. Three of these groups—expenses which pertain to nursing service, to education, and to both jointly—are set forth in the accounts. The fourth group of items represents indirect expenses such as residence, meals, laundry, etc., which must be determined and added to the first three groups. The first three groups will then represent the expenses associated with those individuals who are exclusively in nursing service, exclusively in nursing education, and jointly in both. The expenses associated with the jointly functioning group must then be apportioned between the first two groups. If this is done correctly, then the total cost of nursing service and nursing education is available.

Several interesting errors may creep in. One common mistake is that often an item is charged to "expense" at the time an expenditure is made, rather than when the value is utilized in the rendering of service. The result is a double error. In one period, expense increases the cost of the service rendered when actually no expense was incurred. In a subsequent period, therefore, the service cost is inaccurate because an expense was omitted. A second blunder often made by the hospital accountant is that of analyzing a transaction incorrectly. Supplies used by nurses for the benefit of patients will be charged to nursing supplies and be considered as an item purchased for the benefit of nurses. It is true that some items are purchased for the benefit of nurses, and rightly

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should be considered a part of the remuneration which the nurse receives. However, supplies for patients definitely do not fall within this category.

Still another mistake is often made when the hospital acts as the purchasing agent for personal items which are to be paid for by nurses and students. When the expenditure is made under this condition it is often charged against the nurse or student without later being cancelled.

Serious errors may arise in allocating to nursing service and nursing education such indirect expenses as meals, laundry, illness and residence. The two questions which present themselves here are: what expenses within each activity are to be allocated, and what is to be the basis of allocation? As an illustration, the dietary department serves meals to patients, doctors, employees, and sometimes to the public. The total cost of this department is made up of salaries, cost of food, the use of equipment, and other expenses. It has often been the practice in hospital accounting to divide this total cost by the number of meals served, and then to charge the nursing personnel with the respective number of meals consumed. That this procedure is incorrect is demonstrable. In many cases special diets constituted a substantial item of the total expense, which was partly charged to nursing service and nursing education although not incurred for them. Further, it is also evident that if meals are not served to nurses and students, total cost will not be reduced by the amount formerly charged to them. The reason for this is that total expenses included certain expenses which were fixed in amount and did not fluctuate in proportion to the number of meals served. Actually, the only items which should have been included in the cost of meals to nurses were those expenses which could have been eliminated if that number of meals were not served. In general, the smaller the number of meals to be eliminated, the smaller the number of items of expense that can be reduced. In this particular instance it can be generally agreed that meals should serve as a basis of apportionment; it is not always easy to decide what expenses are to be apportioned. In other instances, such as in the allocation of heating expenses to the residence, different bases such as cubic feet or volume, or square feet of floor area can be used.

Aside from these mistakes which pertain solely to accounting, the most serious errors are those which pertain to the division of expense associated with the personnel who function in both nursing service and nursing education. In this connection, it was noted that all persons belonging to this jointly functioning group were considered as a separate category, and that direct expenses, such as salaries, were accumulated for this group. To this classification were also added the indirect expenses associated with this jointly functioning personnel, such as meals, residence, illness, etc. The total expense of this group is then available for allocation between nursing service and nursing education.

It is quite unsatisfactory to attempt merely an estimated apportionment of the time of those persons functioning in both nursing service and nursing education. Each hospital should undertake a careful analysis of their activities in order to assure an equitable division of the total expense of the group. In those hospitals studied, the average amount of time devoted to nursing education by head nurses was 9 per cent, and about 18 per cent by supervisors. This is to be compared with the 25 to 50 per cent figure commonly estimated. In other positions, the amount of time so devoted varied too greatly for a representative figure to be possible. This proved that cost results would be valid only if based upon a careful analysis of activities existing in the particular institution. Divisions of expense of this jointly functioning group, based upon averages of other institutions, are untenable. In all cases, the magnitude of possible error is governed by the amount of salary and the number of such personnel.

Fourth Problem

The fourth problem which is involved in an acceptable cost analysis is that of measuring service rendered. An accurate measurement of expense in financial terms is useless unless it is related to an accurate statement of the services resulting. The two must be presented side by side. This measurement of nursing service falls specifically within the scope of the nursing personnel.

An indispensable item which must be determined in the process of cost separation is the service given by student nurses. It is extremely important that the effectiveness of this service be accurately calculated. The school incurs expenses on behalf of students. In return, as part of the educational scheme, the student nurse renders service to the patients of the hospital. The effective value of that service, plus educational and other fees charged the students, should be offset against the expense of operating the school to determine the net contribution or the net cost. Therefore, in determining this net figure, it is just as essential that the effectiveness of the service be accurate as it is that the expense be correct.

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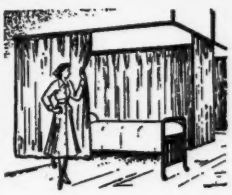

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separating nursing service and nursing education costs, as presented in the final Report, the Cost Committee was enabled to draw up conclusions pertaining to the use of hospital funds for educational purposes.

> "If the school shows a net contribution to the hospital . . . it is undoubtedly legally proper, regardless of the source of income, for the hospital to increase its allotment to a school by an amount equal to the net contribution. Such an amount, however, should not be regarded as the maximum sum essential to the operation of an educational program. If a hospital chooses to conduct a nursing school, it is responsible for securing whatever funds may be necessary to insure a program of sound education."

The three schools which were selected for the study because of their high present standards make an annual contribution to their respective hospitals of $2,675, $10,250, and $21,146. It is an interesting commentary that in these schools, class and clinical instruction, supplies, equipment, and library expenses per student per year were $128, $157, and $117. The amounts included in these annual totals for library expenses were $1.30, $8.97, and $0.94 respectively. In these same hospitals the annual costs to the hospital per graduate general staff nurse for salaries, board, room, laundry, illness, vacations, and all other items and services where provided were, on an hourly basis of actual service rendered, 45 cents, 56 cents, and 57 cents respectively.

It is my belief that in the field of nursing education, the order of the day is a shifting emphasis. More and more the emphasis is placing nursing education in a category apart from the hospital. If the hospital wishes to carry on nursing education, it should recognize it as a joint activity, co-equal in importance with that of caring for the sick. As joint activities, every attempt should be made to safeguard the standards of both.

For clarification of these activities, a statement of financial expenses of the two should represent two separate budgets: one a budget for the school of nursing, and the other a budget for nursing service. In addition to the financial aspects, the nursing school budget should express the educational program of the school. Similarly, the nursing service budget should show the quality and amount of nursing which the hospital is to render to its various patients. However, the form that these activities take and their close inter-relationship in so far as practice is concerned, create special accounting problems which must be dealt with and solved. The solution of these problems requires the application of valid principles in every step of the procedure, precise methods, and the use of factual information. Nursing costs become increasingly reliable and therefore valuable as they are distinguished by the application of sound principles and techniques.

Dr. E. R. Crew Resigns

Dr. E. R. Crew, one of the most prominent hospital administrators in Ohio, has resigned the superintendency of the Miama Valley Hospital after having served twenty-eight years as head of that institution. The resignation becomes effective when his successor is chosen.

The Miami Valley Hospital is contemplating the construction of a new $500,000 addition. Dr. Crew will remain as consultant and adviser to the Board of Trustees.

During Dr. Crew's administration the Miami Valley Hospital has grown from a 150-bed institution, administering to less than 2,000 patients annually, to a hospital of more than 400 beds, admitting 12,000 patients each year. During Dr. Crew's administration the Miami Valley has built the Smith Memorial Building and added an addition thereto. The surgical building was built at a cost of $650,000 and the Whitmore Home at a cost of $93,000. Three wings were built on the nurses' home and Magnolia Hall was erected.

One and a Quarter Million Dollars for Tuberculosis Hospital

An interesting decision by Probabe Judge Gideon Palmer made available to Butler County, Ohio, the sum of $1,250,000 for the erection and maintenance of a tuberculosis hospital. This sum was bequeathed for this purpose by the late Eugene H. Hughes, a Butler County farmer.

In his will Mr. Hughes made no provision for the maintenance of the institution after it was constructed, and the executor filed a suit to construe the will. The decision of Judge Palmer is of interest to hospitals, not only in Ohio but in other states. In his opinion, the court held:

> "Even if no funds were provided for maintenance and operation, the validity of the charitable trust is not destroyed. If the funds available are ample to build and equip or to found and establish a hospital, such as he intended, and also to maintain and operate the same, I think the trustees under the law have the implied power to maintain and operate it."

M. BURNEICE LARSON, DIRECTOR

DEFENSE AND YOU

Throughout the country there is taking place a great mobilization of men and women, too, who during the forthcoming year—or perhaps for a longer time—will be a part of the National Defense program. Physicians have been called, graduate nurses, laboratory technicians, dietitians, physiotherapists, pharmacists—it would be difficult to mention any phase of hospital service or the medical profession upon which the personnel needs of the program have not left their mark.

Heads of hospitals, physicians in private practice, great industries are calling upon us today to replace the skilled men and women who have reported or will shortly report for duty at some training camp or government hospital. The positions available are consistently desirable—of a type which would be open at but rare intervals under ordinary conditions.

Many of the men and women whose qualifications are on file with us have been selected to report within the next week or ten days in connection with some of these splendid openings. But we shall need many, many more in every branch of medicine, in every hospital department requiring people who are especially trained, highly skilled in their chosen work.

No matter where you are, we can effect an introduction between you and the clients whose offers would mean material advancement for you with a minimum of time and effort on your part—and in strictest confidence.

If you have not already done so, write us today. We in turn will rush a registration form to you that you may file your qualifications with us without a moment's delay.

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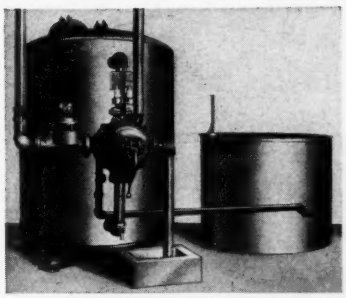

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REFINITE

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News of Interest to Buyers

Lewis, Bauer & Black Join Forces

Two outstanding and important names in the hospital and medical supply field will merge January 1, 1941. The organizations, both divisions of The Kendall Company, are the Lewis Manufacturing Co. and Bauer & Black. Under the reorganization the company headquarters will be transferred under one roof to 2500 South Dearborn Street, Chicago, and will operate under the name:

Lewis Manufacturing Co. . . . Bauer & Black
Divisions of The Kendall Company

In the past the two Kendall Company divisions have handled the same high quality products under separate and distinct brand names. The brand name "CURITY," which has appeared on the products of the Lewis Manufacturing Co., will now appear on the professional products of both organizations.

New "PYREX" Brand Desiccators

Corning Glass Works announces a new six-inch size "PYREX" brand Desiccator in two styles—designed to make vacuum work easier and faster. The new type valve embodies special features. The external sleeve acts as a stopcock. A one-quarter turn of the collar opens or closes the valve so that it is easy to manipulate and there is no sticking.

Pyrex brand Balanced Chemical Glass—balanced for mechanical strength, heat resistance and chemical stability—is used in the construction of "Pyrex" desiccator. Write Corning Glass Works, Corning, New York.

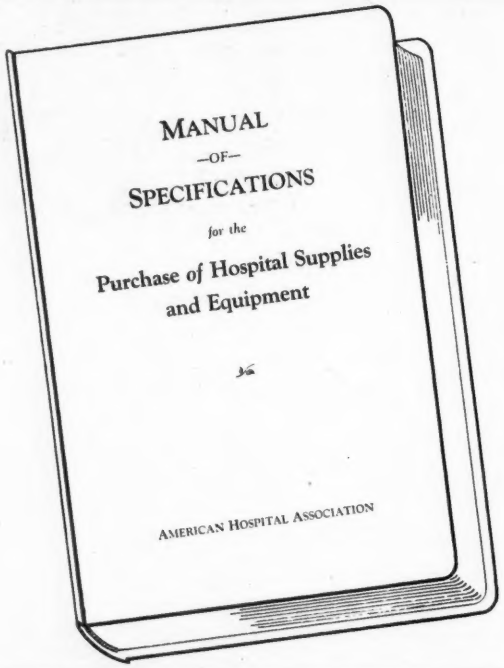
Information About Two New Tables

Two new booklets came off the press recently which you should be sure you have in your files. One takes up the subject of urological x-ray tables, the other the fracture and orthopedic tables. Here you have all the details in description and in extremely high-grade photography which demonstrate the latest in this type of equipment.

Scanlan-Morris Company of Madison, Wisconsin, has painstakingly prepared these presentations to assist you in making your decisions when purchasing this equipment for your hospital. This material is educational, as well as informative about needed specifications. It is noteworthy material because of its scientific approach instead of high pressure sales approach.

New Office in Chicago

A news item of interest to midwestern hospital buyers is that St. Marys Woolen Manufacturing Company of St. Marys, Ohio, whose advertising you have seen in *HOSPITALS*, has established a direct mill sales office in Chicago at the Merchandise Mart. M. E. Hawkins is in charge, with Robert L. Baird, Jr., as an associate covering the contract field.



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Compiled and edited by the Committee on Simplification and Standardization of the Council on Hospital Planning and Plant Operation of the American Hospital Association.

Published by the American Hospital Association, 18 East Division Street, Chicago. Price $5.00.

Modernize THE CONNECTICUT WAY

. . . one step at a time, within your maintenance budget

The new Connecticut Modernizing Policy permits complete hospital modernization, one or more departments at a time, with a minimum of service interruption, and at lowest cost. Our liberal allowance for replaced equipment means a generous saving, and Connecticut's high standards of engineering guarantee the most economical and longest lived service.

For instance, here's an important modernizing unit

THE CONNECTICUT DIET KITCHEN TELEPHONE SYSTEM

● This system provides direct communication between diet kitchens and the main kitchen at all times, thereby eliminating a heavy flow of traffic through the main switchboard at meal times. Installation is quick, easy, and costs little. Here is a profitable investment in improved efficiency that will do much to save time and effort during rush hours.

A thorough survey of your signaling and communications system by a Connecticut field engineer will cost you nothing, and will enable you to plan your modernizing program intelligently and with maximum economy.

Modernize a step at a time as your maintenance budget permits.

CONNECTICUT TELEPHONE AND ELECTRIC CORPORATION
MERIDEN, CONNECTICUT

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"A sharp-pointed needle Outlasts Five?"

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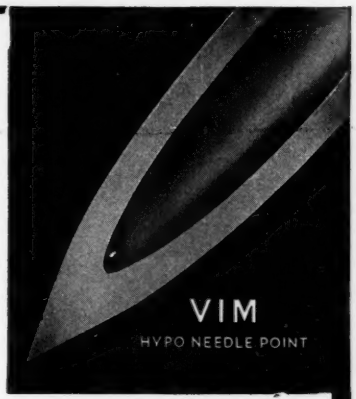

That's why I specify VIM—the one needle with the long-lasting sharp point. It's made of stainless *cutlery* steel which means Firth-Brearley. You want steel for sharpness . . . cutlery steel for long-lasting sharpness. VIM has both; it is sharp—stays sharp longer.

Write VIM on the order. Get needles that will outlast and outlive ordinary needles as much as five times—and save.

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Made from Firth-Brearley *Cutlery* Steel
"The 'Sterling' of Stainless Steels"

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News Notes of Interest to the Hospital Field

Rudy Bull has assumed her duties as superintendent of Aroostook Hospital, Houlton, Maine, succeeding **Harriet T. Blanch, R.N.,** who resigned to accept the superintendency of Waldo County General Hospital, Belfast, Maine.

Clara A. Coleman, formerly principal of nurses at Fairview Park Hospital, Cleveland, Ohio, has assumed her duties as superintendent of City Hospital, Warren, Ohio. Miss Coleman succeeds **Margaret M. Reilly,** who resigned on November 1.

H. Dalton Craven succeeds **L. M. Teffeau** as administrator of Alpena General Hospital, Alpena, Michigan.

Dr. John T. Crebbin has been elected superintendent of the New Orleans Eye, Ear, Nose and Throat Hospital, New Orleans, Louisiana.

E. Hampton Decker was appointed superintendent of the Prospect Heights Hospital, Brooklyn, New York, effective December 1. Mr. Decker succeeds **Herbert N. Morford,** who resigned to accept the superintendency of the Litchfield County Hospital, Winsted, Connecticut.

Dorothy Elson is superintendent of the new East Side Hospital Clinic, Toledo, Ohio. This institution was recently constructed at a cost of $200,000, and will provide emergency service twenty-four hours a day.

Dorothea Ely has been appointed superintendent of the Jennie Edmundson Memorial Hospital, Council Bluffs, Iowa, succeeding C. C. Hurin.

B. E. Foss has resigned as associate superintendent of Norwegian Lutheran Deaconess Home and Hospital, Brooklyn, New York, to accept the superintendency of the Knickerbocker Hospital, New York.

Mary E. Gelser, R.N., has resigned as superintendent of St. Joseph Sanitarium, St. Joseph, Michigan.

Lucile M. Jakes, who last spring resigned as superintendent of the Jasper County Hospital, Rensselaer, Indiana, has been appointed superintendent of the Cass County Hospital, Logansport, Indiana. Miss Jakes succeeds **Gladys Brandt, R.N.,** who resigned to accept the superintendency of Children's Free Hospital, Louisville, Kentucky.

Dr. E. F. Jones has been named acting medical superintendent of the Richmond State Hospital, Richmond, Indiana, succeeding **Dr. Richard Schillinger,** who died recently

Captain John A. Lindner, formerly of the U. S. Army, has been appointed superintendent of the Perth Amboy General Hospital, Perth Amboy, New Jersey.

Shirley Nickloy is director of nurses of the Battle Creek Sanitarium, Battle Creek, Michigan. Miss Nickloy succeeds **Leone Sweet,** who resigned.

Russell C. Nye, associate hospital consultant on the staff of Dr. Carl Buck of the Kellogg Foundation in New York City, has been appointed assistant administrator of the Dallas City-County Hospital System, Dallas, Texas, of which Dr. E. M. Dunstan is superintendent.

Sister Irene Papineau, Superior of St. Vincent's Hospital in Toledo, Ohio, has been appointed superintendent of the Notre Dame Hospital in Montreal, Canada. Sister Papineau had been associated with Notre Dame Hospital for sixteen years before coming to St. Vincent's. **Sister Mary Farley,** for twenty-five years secretary-treasurer of St. Vincent's Hospital, has been named Superior to succeed Sister Papineau.

Lucina Reep, superintendent of Sheldon Memorial Hospital, Albion, Michigan, since 1934, has resigned to become superintendent of the Wabash County Hospital, Wabash, Indiana.

Dr. William O. Rice has been appointed superintendent of the State Infirmary, Howard, Rhode Island. Dr. Rice was formerly superintendent of the Rhode Island Hospital, Providence, Rhode Island.

Charles E. Vadakin, formerly director of Doctors' Hospital, Washington, D. C., is now superintendent of the new Fairmont General Hospital, Fairmont, West Virginia, succeeding **Marie Robertson,** who resigned.

Dr. Herbert McC. Wortman has been appointed superintendent of the Mountainside Hospital, Montclair, New Jersey, to succeed **Dr. Charles H. Young,** resigned. Dr. Wortman has been assistant director of the hospital since October, 1937.

Dr. Charles H. Young, who recently secured a six months' leave of absence from his duties as director of Mountainside Hospital, Montclair, New Jersey, has accepted the position as administrator of the Jefferson Hospital, Birmingham, Alabama.

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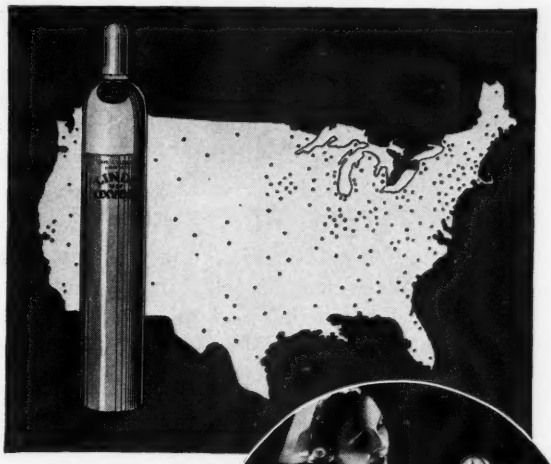

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Oakland, California—Plans for the construction of a new unit at the Merritt Hospital, Oakland, California, to be known as the Fabiola Wing to perpetuate the name of Oakland's first private hospital, were completed and construction will start within a very short time. The new unit will provide accommodations for an additional forty or fifty patients.

The Merritt Hospital was established by one of Oakland's prominent physicians, Dr. Samuel Merritt, who, in making the bequest for the foundation of Merritt Hospital, stressed his desire not only to construct a first-class hospital but also "to provide care for those who, under normal circumstances, are able to provide for their families and meet their obligations, but who are unable to carry the added financial burden of sudden illness." A similar policy was observed at Fabiola Hospital during the period of its operation, and this policy is a condition of the transfer of the funds by the directors of Fabiola Hospital to Merritt Hospital for the construction of the Fabiola wing.

Wilmington, Delaware—The cornerstone of the first unit of the Delaware Hospital, Wilmington, Delaware, was laid on December 2. The building program will increase the hospital capacity from 290 to more than 400 beds.

Port St. Joe, Florida—The new municipal hospital at Port St. Joe, Florida, is now under construction.

Atlanta, Georgia—The Government has approved plans for the construction of a 2,000-bed hospital at Camp Gordon near Atlanta, Georgia, to cost $2,776,000. Work on the hospital will start at the earliest possible date.

Cartersville, Georgia—Contract has been let for the construction of a modern hospital for Cartersville, Georgia. The hospital will cost $25,000.

Milledgeville, Georgia—The new Georgia State Hospital for Insane, which has been erected at a cost of $7,000,000, at Milledgeville, Georgia, was formally dedicated on December 6. The new medical center will accommodate 7500 patients.

Louisville, Kentucky—The Kentucky Baptist Hospital, Louisville, Kentucky, is planning an additional unit to increase the bed capacity of the hospital by thirty-five beds. The new unit will cost approximately $150,000.

Somerset, Kentucky—The citizens of Somerset, Kentucky, have authorized a bond issue of $100,000 for the purpose of constructing a modern 50-bed hospital.

Chicago, Illinois—Ground has been broken for the construction of the new addition to Englewood Hospital, Chicago, and Samuel W. Rice, superintendent, advises that the new building will be ready for occupancy in six to ten months.

Morrison, Illinois—Plans have been approved for the construction of a new hospital for Morrison, Illinois. Plans call for a thirty-bed modern hospital.

Davenport and Waterloo, Iowa—Under the terms of the will of Louis W. Witry, a Waterloo industrialist, St. Vincent's Hospital, Davenport, Iowa, will receive $10,000, and three general hospitals at Waterloo, Iowa, will also received $10,000.

Fort Devens, Massachusetts—Contract has been let for the construction of a second 1000-bed hospital, designated as a general hospital to serve the entire first corps area of the United States Army, and costing approximately $1,500,000, which will augment the facilities of the $1,200,000 building now being erected.

Pontiac, Michigan—Plans have been approved for the construction of a $100,000 addition to the Pontiac General Hospital, Pontiac, Michigan.

Kansas City, Missouri—The General Hospital, Kansas City, Missouri, has started construction on a new unit to cost $200,000 and a modernization of its own plant to cost in the neighborhood of $250,000. The work is expected to be completed by the middle of 1941.

Cedar Grove, New Jersey—The Essex freeholders are studying plans for a $1,500,000 building program at Overbrook Hospital, Cedar Grove, New Jersey. Construction will include two new units in addition to the third floor of the reception building.

Dunkirk, New York—The Brooks Memorial Hospital, Dunkirk, New York, is planning a new building which will cost $150,000.

Mount Vernon, New York—The new addition to the Mount Vernon Hospital, Mount Vernon, New York, was formally opened on November 4. The new addition, consisting of three floors (medical wards, surgical wards, and a pediatric department) increases the capacity of the hospital from 180 to 260 beds.

New York, New York—A new $750,000 pavilion to accommodate 120 patients is now being constructed at St. Vincent's Hospital, New York City.

New York, New York—St. Clare's Hospital, New York City, has awarded contracts for the erection of a new building which will be built in the rear of the present buildings. Mother M.

CLASSIFIED ADVERTISEMENTS

RATES: Eight cents a word. The minimum advertisement is 25 words at a cost of $2.00, including address or key number of 5 words. All answers to keyed advertisements will be forwarded. Classified advertising copy must be received at the office of *HOSPITALS*, 18 E. Division St., Chicago, Illinois, by the fifteenth of the month preceding issue Commercial announcements accepted at the same rate. Remittance must accompany classified advertisements.

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THE MEDICAL BUREAU
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Palmolive Building
Chicago, Illinois

ADMINISTRATOR—Physician thoroughly experienced in administration and highly regarded by his colleagues, desires position; bachelor's and medical degrees from leading schools; several years' public health experience before entering field of hospital administration; twelve years, administrator hospital group. H1-10.

MEDICAL ANESTHETIST—Young woman physician; graduate of eastern school; two-year internship; two-year residency in anesthesia. H1-11.

PATHOLOGIST—Certified by American Society of Clinical Pathologists; past several years, laboratory director, 200-bed hospital; no particular preference as to locality. H1-12.

RADIOLOGIST—B.S., M.D. degrees, eastern schools; two-year rotating internship; two years' general practice; recently completed three-year fellowship in radiology (service included roentgen-diagnosis, roentgen-therapy, and radium-therapy). H1-13.

ADMINISTRATOR—Layman; B.S. in commerce, state university; two years, accounting department, state university; year's administrative internship; two years, assistant in administrative offices, university hospital group; will consider assistantship to administrator, large hospital, or superintendency small hospital. H1-14.

DIRECTOR OF NURSES—A.B., M.A. degrees; several years' teaching experience; past several years, director of school and nursing service, large general hospital; received Phi Beta Kappa and other honors while in college; has been responsible for equipping two new additions; is recommended as excellent organizer, extremely able, at home in any social group. H1-15.

SOCIAL WORKER—B.A. degree, state university; graduate training in medical social work, Simmons; seven years' experience as medical social worker. H1-16.

PHYSIOTHERAPIST—Graduate university school of nursing; year's excellent training in physiotherapy; five years' interesting experience. H1-17.

DIETITIAN—B.S. degree, state university; eight years, assistant dietitian, doing special diets in large teaching hospital; three years, chief dietitian, 500-bed hospital; excellent administrator. H1-18.

TECHNICIAN—Year's training in x-ray, university hospital; three years, x-ray technician, small private hospital. H1-19.

PHARMACIST—Ph.G. degree, school of pharmacy, Western Reserve University; eight years in charge of pharmacy, 225-bed hospital. H1-20.

RESIDENT—Young physician completing internship July 1 is available for medical residency; will go anywhere; not likely to be called to service. H1-21.

INTERSTATE HOSPITAL AND NURSES BUREAU
Mary E. Surbray, R.N., Director
332 Bulkley Building
Cleveland, Ohio

DIRECTRESS OF NURSES: Graduate Cornell University; B.S. degree. Courses in Nursing Education, Columbia University. Teaching and executive experience in large and medium-size hospitals. Registered, New York, Massachusetts. Available for appointment.

POSITIONS WANTED (Continued)

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1825 Empire State Building
New York City
Charlotte M. Powell, R.N., Owner-Director
Specializing in Superior Personnel

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POSITIONS OPEN

NURSE PLACEMENT SERVICE
Anna L. Tittman, R.N., Executive Director
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Chicago, Illinois

ADMINISTRATION—(a) *Superintendent:* Newly equipped convalescent home; middlewest; background of psychiatric and public health nursing experience desired; $2,400 plus $600 for outside maintenance. No. 40-3006. (b) *Director of Nursing:* Children's Hospital; modern equipment; fourteen schools affiliate. No. 40-3187. (c) *Assistant Director of Nursing:* 200-bed New England hospital with school of nursing; salary open. No. 40-3158.

EDUCATION—(a) *Nursing Arts:* 50 students; 225-bed eastern hospital; also carries administrative duties in nursing office; $130, maintenance; open now. No. 40-3038. (b) *Nursing Arts:* 47 students; school of nursing affiliated with State University; pediatric affiliation at State Hospital; north central state; open now. No. 40-3010. (c) *Science:* school connected with 375-bed midwestern hospital; to teach microbiology and chemistry; open spring semester. No. 40-3114.

SUPERVISION—(a) *Obstetrical:* 275-bed hospital; large midwestern city; salary open. No. 40-3178. (b) *Medical:* 400-bed university hospital; southwest; responsible for formal and ward teaching; $110, maintenance. No. 40-3125. Also opening at this hospital on surgical floor. No. 40-2695. (c) *Operating Room:* 250-bed New England hospital; experience and post-graduate course required; salary $125, maintenance. No. 40-2617. (d) *Pediatric:* 250-bed university hospital; Rocky Mountain region; degree; experience or post-graduate course; salary $125, maintenance. No. 40-2826.

LABORATORY & X-RAY TECHNICIAN—(a) registered nurse with accredited laboratory course and knowledge of X-ray; 40-hour week; large mid-western public service company; attractive salary. No. 40-3100.

ANESTHETIST—New 600-bed southern hospital; open soon; several vacancies; salary $135, maintenance. No. 40-3084.

STAFF NURSES—(*General Duty*) (a) large mid-western private hospital has several openings in newly organized departments; salary $65-$75, maintenance. No. 40-2931. (b) Numerous excellent opportunities for nurses with post-graduate work in all specialties; attractive salaries.

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